

# Land at Frog Island Ferry Lane, Rainham Transport Assessment







April 2024

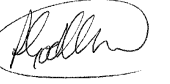





Prepared on Behalf of Tetra Tech Limited.  
Registered in England number: 0195970

# Document Control

<b>Document:</b>	Transport Assessment
<b>Project:</b>	Land at Frog Island, Ferry Lane, Rainham
<b>Client:</b>	GRS Integrated Solutions
<b>Job Number:</b>	B065006
<b>File Origin:</b>	T:\Projects\784-B065006_Frog_Island\60 Project Output\Transport\2. Reports\2.1 Transport Assessment\RT784-B065006-01 Frog Island TA April 2024.docx

<b>Revision:</b>	1	<b>Status:</b>	Draft
<b>Date:</b>	12/04/2024		
<b>Prepared by:</b> Pravin Godhania/Issac Cranston  	<b>Checked by:</b> Rob Holland 	<b>Approved By:</b> Alistair Gregory 	
<b>Description of revision:</b>			

<b>Revision:</b>	2	<b>Status:</b>	Final
<b>Date:</b>	16/04/2024		
<b>Prepared by:</b> Pravin Godhania/Issac Cranston  	<b>Checked by:</b> Rob Holland 	<b>Approved By:</b> Alistair Gregory 	
<b>Description of revision:</b>			

<b>Revision:</b>		<b>Status:</b>	
<b>Date:</b>			
<b>Prepared by:</b>	<b>Checked by:</b>	<b>Approved By:</b>	
<b>Description of revision:</b>			

## Contents

1	INTRODUCTION.....	5
2	PLANNING POLICY CONTEXT .....	7
3	TRANSPORT PLANNING FOR PEOPLE .....	16
4	EXISTING CONDITIONS.....	19
5	ACTIVE TRAVEL ZONE ASSESSMENT .....	36
6	TRIP GENERATION AND DISTRIBUTION .....	44
7	SUSTAINABLE TRANSPORT STRATEGY.....	49
8	FUTURE TRAFFIC FLOWS.....	51
9	HIGHWAY IMPACT .....	53
10	SUMMARY .....	57

## Tables

Table 3-1:	TCoL's demographic segments with descriptions .....	16
Table 3-2:	Existing demographic segment proportions – London Borough of Havering .....	17
Table 4-1:	Summary of Bus Services with 2km Walking Catchment.....	30
Table 4-2:	Summary of Train Services Operating from Rainham railway station.....	30
Table 4-3:	Personal Injury Collisions 2018 to 2022 .....	33
Table 4-4:	Casualties by Travel Mode .....	34
Table 5-1:	ATZ Key Destination Prioritisation .....	38
Table 5-2:	ATZ Assessment Journey 1 – Tesco Supermarket   Healthy Street Indicator Analysis.....	42
Table 6-1:	GRS Site Existing Trip Generation .....	44
Table 6-2:	B8 Trip Generation .....	46
Table 6-3:	Net Difference - HGV and Other Vehicles .....	47
Table 6-4:	Net Difference - Combined HGV and Other Vehicle movements.....	47
Table 9-1:	2024 Base Year - Junction Capacity Assessment.....	55
Table 9-2:	2029 Future Year - Junction Capacity Assessment .....	55
Table 9-3:	Traffic Impacts at the Ferry Lane / A13 Dumbbell Roundabouts .....	56

## Figures

Figure 2-1:	PTAL Map.....	12
Figure 3-1:	Demographic Segments - Site Specific.....	17
Figure 4-1:	Existing Site Access .....	19
Figure 4-2:	Swept Path Analysis – 16.5m Articulated HGV & Visibility Splays .....	21
Figure 4-3:	Unmarked Staff / Visitor Car Parking.....	23
Figure 4-4:	Walking and Cycling Catchment Plan .....	24
Figure 4-5:	Footways on Ferry Lane.....	25
Figure 4-6:	Rainham Marshes Nature Reserve - Shared Walking & Cycling Path.....	26

Figure 4-7: NCN 13 Route .....	28
Figure 4-8: Bus Stop (Stop N) - Nearest to Site.....	29
Figure 4-9: Ferry Lane (view to the south of the site) .....	32
Figure 4-10: Ferry Lane (View to the north of the site) .....	32
Figure 4-11: PIC Study Area (2018 - 2022) .....	34
Figure 5-1: ATZ Map One .....	37
Figure 5-2: ATZ Map Two .....	39
Figure 5-3: ATZ Map Three.....	40
Figure 5-4: Worst Point - Northern Dumbbell Pedestrian Crossing .....	42
Figure 8-1: Traffic Flow Diagram - Plot 24 and 26 Land off Ferry Lane .....	52

## Appendices

Appendix A – Current Situation
Appendix B – Scoping Email
Appendix C – Swept Path Analysis and Visibility
Appendix D – Raw Traffic Survey Data
Appendix E – ATZ Assessment Map 1 - 3
Appendix F - Raw Trip Generation Output
Appendix G – Trip Distribution Flow Diagrams
Appendix H – Modelling Assessment Output
Appendix I – Full Flow Diagrams



# 1 INTRODUCTION

## 1.1 BACKGROUND

- 1.1.1 Tetra Tech has been appointed by GRS Integrated Solutions (GRS) to prepare a Transport Assessment (TA) in support of an appeal for the unlawful land use of an existing minerals and waste processing site at Frog Island, Ferry Lane, Rainham. The site is currently operated by GRS and has been historically operated by S Walsh & Son Limited. To avoid any confusion, S Walsh & Son Limited is 100% owned by GRS and is the tenant of the site.
- 1.1.2 London Borough of Havering (LBH) served an enforcement notice (ENF/559/20) on 18th July 2022 for the alleged material change of land-use from storage (B8) to a waste management facility importing, processing and exporting waste materials. This TA has been prepared to assess the highway and transport related matters arising from the alleged change of use for processing construction and demolition waste material. The site boundary can be seen in **Appendix A** edged red.
- 1.1.3 The highway network near the site is maintained by LBH in their capacity as the local highway authority. LBH are also the Mineral Planning Authority responsible for the determination of the planning application. The site is situated on Ferry Lane within LBH, Rainham.

## 1.2 SCOPE OF TRANSPORT ASSESSMENT

- 1.2.1 Following a MS Teams scoping discussion on Wednesday 13<sup>th</sup> March 2024, an email was also sent to LBH on 13<sup>th</sup> March 2024 to agree the scope of this TA. No response was received by LBH and therefore it was assumed that the scoping was satisfactory. The scoping that has been taken into consideration can be seen in **Appendix B**. This TA has been prepared in general accordance with the National Planning Policy Framework (NPPF), Planning Practice ‘Travel Plans, Transport Assessments and Statements’ and Transport for London’s (TfL) Healthy Streets.
- 1.2.2 The TA report demonstrates that the site can be accessed in a safe and suitable manner and that access can be achieved in accordance with appropriate design standards.

## 1.3 REPORT LAYOUT

- 1.3.1 This TA investigates the highways and transportation issues associated with the site. The structure of the report is as follows:
- Chapter 2 describes relevant planning policy and design guidance.
  - Chapter 3 assesses the demographic of site users.
  - Chapter 4 describes existing site and conditions.
  - Chapter 5 provides an Active Travel Zone Assessment.
  - Chapter 6 summarises the development trip generation and distribution calculations.

- Chapter 7 discusses potential sustainable transport strategies to implement into the site.
- Chapter 8 outlines the future assessment year, background traffic growth and committed development traffic.
- Chapter 9 assesses junction capacity.
- Chapter 10 summarises the report.

## 2 PLANNING POLICY CONTEXT

### 2.1 PREAMBLE

2.1.1 Within this TA, consideration has been given to the following documents:

- National Planning Policy Framework (NPPF) (December 2023);
- National Planning Practice Guide (NPPG) (2021);
- Healthy Streets for London (TfL, February 2017);
- The London Plan 2021 (March 2021);
- Vision Zero Action Plan (in the Mayor's Transport Strategy) and Mayor's Transport Strategy Addendum Proposal (2022);
- Havering Local Plan 2016 – 2031; and
- Joint Waste Development Plan for the East London Waste Authority Boroughs - Adopted February 2012.

### 2.2 POLICY

#### **National Planning Policy Framework (2023)**

2.2.1 The NPPF is defined as being the document that 'sets the Government's planning policies for England and how these are expected to be applied.' The current version of the NPPF was adopted in February 2019 and last updated in December 2023. The NPPF is not a transport specific document, rather it sets out the Government's general requirements for the planning system.

2.2.2 The NPPF incorporates guidance for local planning authorities when defining their local plans and in determining planning applications. The purpose of the planning system, as identified in the NPPF, 'is to contribute to the achievement of sustainable development,' with three 'objectives' identified as supporting this, which are:

1. Economic – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure.
2. Social – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

3. Environmental – to protect and enhance our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating, and adapting to climate change, including moving to a low carbon economy.

2.2.3 Chapter 9 of the NPPF relates to the promotion of sustainable travel. Paragraph 108 states that:

*“Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:*

- a) the potential impacts of development on transport networks can be addressed;*
- b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
- c) opportunities to promote walking, cycling and public transport use are identified and pursued;*
- d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*
- e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.”*

2.2.4 Paragraph 114 states that:

*“In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

- a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- b) safe and suitable access to the site can be achieved for all users;*
- c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance; and*
- d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.”*

2.2.5 Paragraph 115 notes that ‘development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe’.

2.2.6 Within this context, paragraph 116 notes that “*applications for development should:*

- a) *give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- b) *address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- c) *create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- d) *allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- e) *be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.”*

### **National Planning Practice Guide (2021)**

2.2.7 The government has undertaken a review of the planning guidance that supports the delivery of the NPPF which was most recently revised in June 2021. This guidance helps with the preparation of a TA, Travel Plan (TP) and Transport Statement (TS).

2.2.8 The Planning Practice Guidance on TAs, TPs and TSs includes guidance on:

- When a TA, TP and TS is required;
- How the scope of the plans and assessments should be defined; and
- What should be included within the documents.

### **Healthy Streets**

2.2.9 Healthy Streets is an approach for creating fairer, sustainable and attractive urban spaces. The primary aim is to create an area which, through design (in its widest sense) promotes feelings of safety and security, with numerous places for people to visit and things for them to do, alongside ensuring the area is somewhere that people want to spend time.



- 2.2.10 Compliance with these principles calls for the design of streets to ensure they are readily accessible for all users and easy to cross and navigate, ensuring that local infrastructure promotes walking, cycling and public transport over car use.
- 2.2.11 This development complies with the Healthy Streets agenda in its pedestrian and cycle access arrangements. The site will help deliver the Healthy Streets agenda by having an accessible site for pedestrians and cyclists.
- 2.2.12 Despite the location of the site, there are options for employees and visitors to choose how they travel to the site. These opportunities include walking, cycling and public transport options.

#### **The London Plan 2021 (March 2021)**

- 2.2.13 The London Plan is the overall strategic plan for Greater London and sets out fully integrated economic, environmental, transport and social frameworks for the development of Greater London over the next 20-25 years. It also sets out maximum car parking standards and minimum cycle parking standards for developments across London. The London Plan 2021 was formally published on 2 March 2021.
- 2.2.14 The London Plan is described as being ‘different to those that have gone before it. It is more ambitious and focused than any previous Plans. The concept of Good Growth – growth that is socially and economically inclusive and environmentally sustainable – underpins the Plan and ensures that it is focused on sustainable development.’
- 2.2.15 With regards to transport, paragraph 10.1.1 seeks to integrate land use and transport, while providing a robust and resilient public transport network. It continues to explain that:
- ‘In order to help facilitate this, an integrated strategic approach to transport is needed, with an ambitious aim to reduce Londoners’ dependency on cars in favour of increased walking, cycling and public transport use. Without this shift away from car use, London cannot continue to grow sustainably.’*
- 2.2.16 Policy T4 sets out the strategy for assessing and mitigating transport impacts of developments, this is done so through six overarching principles;
- *‘A - Development Plans and development proposals should reflect and be integrated with current and planned transport access, capacity and connectivity.*
  - *B - Transport assessments should be submitted with development proposals to ensure that any impacts on the capacity of the transport network (including impacts on pedestrians and the cycle network), at the local, network-wide and strategic level, are fully assessed. Transport assessments should focus on embedding the Healthy Streets Approach within, and in the vicinity of, new development. Travel plans, parking design*

*and management plans, construction logistics plans and delivery and servicing plans will be required in accordance with relevant Transport for London guidance.*

- *C - Where appropriate, mitigation, either through direct provision of public transport, walking and cycling facilities and highways improvements or through financial contributions, will be required to address any adverse transport impacts that are identified.*
- *D - Where the ability to absorb increased travel demand through active travel modes has been exhausted, existing public transport capacity is insufficient to allow for the travel generated by proposed developments, and no firm plans and funding exist for an increase in capacity to cater for the increased demand, planning permission may be contingent on the provision of necessary public transport and active travel infrastructure.*
- *E - The cumulative impacts of development on public transport and the road network capacity including walking and cycling, as well as associated effects on public health, should be taken into account and mitigated; and*
- *F - Development proposals should not increase road danger.'*

#### 2.2.17 London Plan Policy - SI 15 Water transport states:

*“A Development proposal should protect and enhance existing passenger transport piers and their capacity. New piers will be supported in line with the Port of London Authority and Transport for London’s Pier Strategy. The necessary provision of moorings, waste and sewage facilities for passenger vessels should be provided.”*

#### 2.2.18 London Plan Policy SI 16 - Waterways – use and enjoyment states:

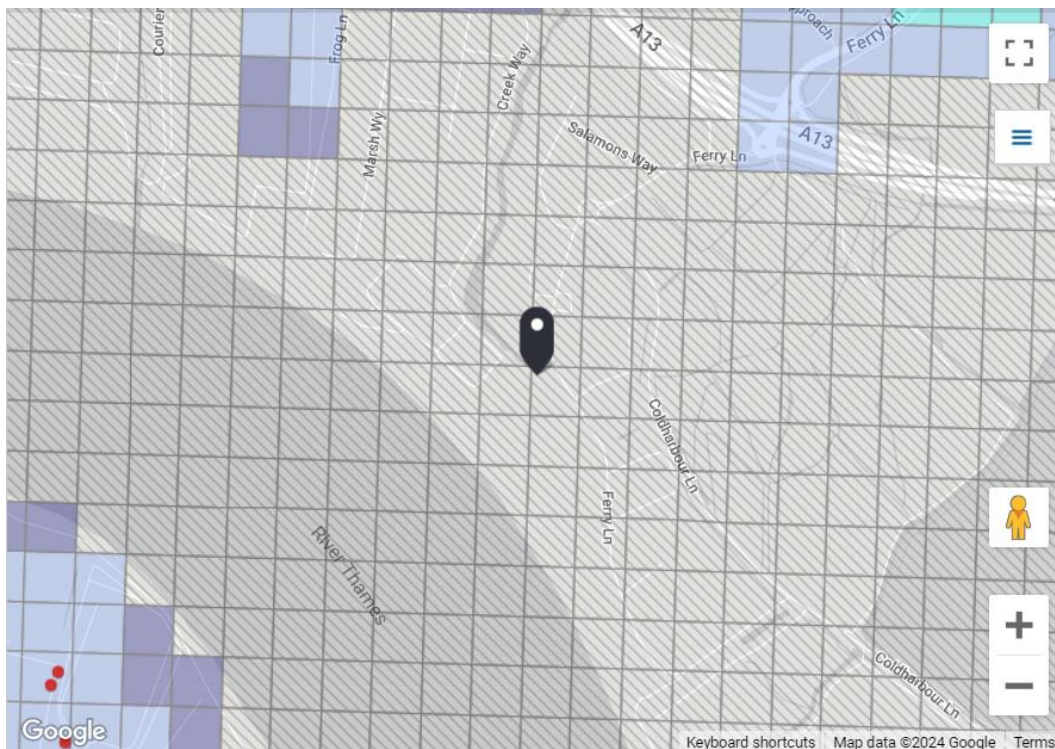
*“A Development Plans and development proposals should protect and enhance waterway infrastructure.*

*New development should utilise the waterways (also known as the Blue Ribbon Network) for transport purposes where possible, but also for active water based leisure, and for informal waterside recreation or access. In order to make the maximum use of London’s waterways a range of supporting infrastructure is required including jetties, moorings, slipways, steps and waterside paths (piers, wharves and boatyards are addressed in Policy SI 15 Water transport).”*

#### **Public Transport Accessibility Levels (PTALs)**

The site is situated within an area of poor public transport connectivity and accessibility, which is indicated by the site’s Public Transport Accessibility Level (PTAL) score of ‘0’ (worst). The PTAL map can be seen in **Figure 2-1**.

**Figure 2-1: PTAL Map**



Source: Transport for London

### **Vision Zero Action Plan (in the Mayor's Transport Strategy) and Mayor's Transport Strategy Addendum Proposal (2022)**

- 2.2.19 The Mayor's Transport Strategy (2018) sets out an ambition for 80% journeys to be made by sustainable modes - public transport, walking and cycling by 2041. This is supported by tackling the dangers that tragically result in road collisions, with lives lost, serious injuries sustained, and the fear of these dangers discouraging walking and cycling.
- 2.2.20 The Vision Zero Action Plan focuses upon reducing road danger, including deaths and injuries, on London's roads and streets. This aims to make London a safer and healthier place that promotes Active Travel.
- 2.2.21 To achieve this the programme adopts a Safe System approach by considering the following principles:
- People make mistakes, so our transport system needs to accommodate human error and unpredictability.
  - There are physical limits to what the human body can tolerate. Our transport system needs to be forgiving, so that the impact of a collision is not sufficient to cause fatal or serious injury.
  - All those with a role in designing, building, operating, managing and using our streets have a responsibility to reduce danger.

## Havering Local Plan 2016 – 2031

2.2.22 The Local Plan has an important role in contributing to the delivery of the Council’s vision. Since February 2015, LBH vision has been to create a clean, safe and proud borough.

2.2.23 LBH's new vision is about embracing the best of what Havering has to offer. The new vision is focused around four cross-cutting priorities: Communities, Places, Opportunities and Connections:

- Communities - We want to help our residents to make positive lifestyle choices and ensure a good start for every child to reach their full potential. We will support families and communities to look after themselves and each other, with a particular emphasis on our most vulnerable residents.
- Places - We will work to achieve a clean, safe environment for all. This will be secured through working with residents to improve our award-winning parks and continuing to invest in our housing stock, ensuring decent, safe and high standard properties. Our residents will have access to vibrant culture and leisure facilities, as well as thriving town centres.
- Opportunities - We will provide first-class business opportunities by supporting the commercial development of companies within the borough, as well as being a hub for start-ups and expanding businesses. We will ensure sustainable economic growth that generates local wealth and opportunities, as well as securing investment in high-quality skills and careers.
- Connections - We want to capitalise on our location with fast and accessible transport links both within the borough and to central London, as well as making the most of national and international connections. Likewise, we will continue to make Havering a digitally-enabled borough that is connected to residents and businesses. Enhancing our connections will strengthen the borough’s offer as a Greater London hub for business.

2.2.24 Local Plan Policy 23 – Transport Connections states; the Council will support and encourage developments in Havering in the locations that are most accessible by a range of transport options. The Council supports development which ensures safe and efficient use of the highway and demonstrates that adverse impacts on the transport network are avoided or, where necessary, mitigated. Major planning applications will require a transport assessment in line with TfL’s Transport Assessment Best Practice Guidance. The Council will work with developers to improve transport infrastructure and the connectivity of the borough by:

*“ix. Working with partners to provide sustainable access to key employment areas across the borough including Rainham Employment Area.*

xvii. *Working with partners including the port of London Authority to explore opportunities for utilising the River Thames for freight and passenger transport to reduce traffic congestion and support local businesses.”*

2.2.25 Local Plan Policy 31 - Rivers and river corridors states; *“Havering’s rivers and river corridors fulfil important biodiversity, recreation, place making, amenity, freight transport and flood management functions which the Council will seek to optimise. The Council will seek to enhance the river environment by requiring major developments near a river to investigate and, where feasible, secure opportunities to restore and enhance rivers and their corridors in line with the Thames River Basin Management Plan (RBMP). This should, wherever possible, include the integration of flood defences into new developments. Where enhancements or restoration are financially viable but not feasible a financial contribution will be sought.*

2.2.26 *To protect and enhance the biodiversity and amenity value of river corridors while accommodating future adaptations to flood defences, the Council will require development to be set back by 8 metres from main rivers, ordinary watercourses and other flood assets, and 16 metres from tidal rivers or defence structures, including tie rods and anchors. In the Thames Policy Area (as identified on the Policies Map) the Council will support development which:*

*i. Establishes a link with the river, preserves and enhances views to and from the river and creates a high quality built and natural environment;*

*iii. Contributes towards the enhancement and extension of a riverside path to enable local communities to enjoy the riverside providing the appropriate life-saving equipment such as grab chains, access ladders and life buoys are provided along the river edge.”*

**Joint Waste Development Plan for the East London Waste Authority Boroughs -  
Adopted February 2012**

2.2.27 Policy W5: General Considerations with regards to Waste Proposals states:

*“Planning permissions for a waste related development will only be granted where it can demonstrate that any impacts of the development can be controlled to achieve levels that will not significantly adversely affect people, land, infrastructure and resources.*

*Applications for new facilities that manage non-apportioned waste must demonstrate that there is not a more suitable site nearer the source of waste arising with regard to the factors listed below.*

*The information supporting the planning application must include, where relevant to a development proposal, assessment of the following matters and where necessary,*



*appropriate mitigation should be identified so as to minimise or avoid any material adverse impact and compensate for any loss including:*

*(xii) transport impact of all movements, including opportunities for use of sustainable transport modes, traffic generation, access and the suitability of the highway network in the vicinity, access to and from the primary route network;*

*(xiii) adverse impacts of all movements including: traffic generation, an unsuitable highway network, inadequate accessibility to the site or the primary road network in the vicinity; and limited or no opportunities for the use of sustainable transport modes.”*

## 2.3 DESIGN GUIDANCE

---

### Design Manual for Roads and Bridges

2.3.1 The DMRB is a suite of design guidance documents published by National Highways. They provide both statutory requirements and guidance for the design, maintenance and assessment of motorways and all-purpose trunk roads and in England, Wales, and Scotland

## 2.4 SUMMARY

---

2.4.1 The site has been considered in accordance with local, regional and national guidance and policy, in particular Policy W5 of the Joint Waste Development Plan and the NPPF. The following chapters of this Transport Assessment will expand on:

- On whether the site has an unacceptable impact on highway safety, or the residual cumulative impacts on the road network will be severe as set out in the NPPF.
- Access by active travel modes as set out in the various local and national policy guidance.
- Demonstrate that the site is in accordance with Policy W5 of the Joint Waste Development Plan for the East London Waste Authority Boroughs by assessing the transport impacts.
- How the site is accessed by vehicular traffic and its compliance to the DMRB.

## 3 TRANSPORT PLANNING FOR PEOPLE

### 3.1 OVERVIEW

- 3.1.1 The Healthy Streets TA format states that ‘Healthy Streets and Vision Zero’ are about putting people first. ‘TfL need to know your development will be a pleasant and convenient place for people of all abilities to walk, cycle and use public transport – including people already in the area.’
- 3.1.2 The purpose of this section of the TA is to set out who the site is for, and how they will travel. This will set the scene for the remaining parts of the TA as it will inform thinking around how the development will need to be configured to meet the needs of the site users.

### 3.2 TRANSPORT CLASSIFICATION OF LONDONERS FOR LONDON BOROUGH OF HAVERING

- 3.2.1 Transport Classification of Londoners (TCoL) is a multi-modal demographic segmentation tool developed by TfL that has been designed to categorise Londoners based on the travel choices they make and their motivations for making those decisions.
- 3.2.2 The desire to understand these behaviours and motivations is borne out of a need to plan effectively for London both now and in the future. Understanding who will use the development and their expected travel behaviours based on the TCoL’s demographic segments has been used to inform the design of the site.
- 3.2.3 TCoL provides information about the existing demographic segment proportions at borough level. TCoL has identified nine high-level tier demographic segments as detailed in **Table 3-1**:

**Table 3-1: TCoL's demographic segments with descriptions**

Demographic Segment	Description
Affordable Transitions	New jobs & families - Low car, high bus, walk, cycle – Highest level of change
City Living	High incomes – High public transport especially tube/active travel – Average level of change
Detached Retirement	‘Empty nest’/retired – Very high car – Very low levels of change
Educational Advantage	Well educated, high income – High Public transport/active, low car – Higher level of change
Family Challenge	Low-income families – High bus, average others – Higher level of change
Settled Suburbia	Lower income families – High car – Below average level of change
Students & Graduates	Students & young graduates – Low car, high bus/walk – Average level of change
Suburban Moderation	Families with children – High car, some bus – Average level of change
Urban Mobility	Young workers, good incomes – Low car, high cycle/public transport – Above average change

3.2.4 **Table 3-2** shows the demographic segment proportions present within the LBH.

**Table 3-2: Existing demographic segment proportions – London Borough of Havering**

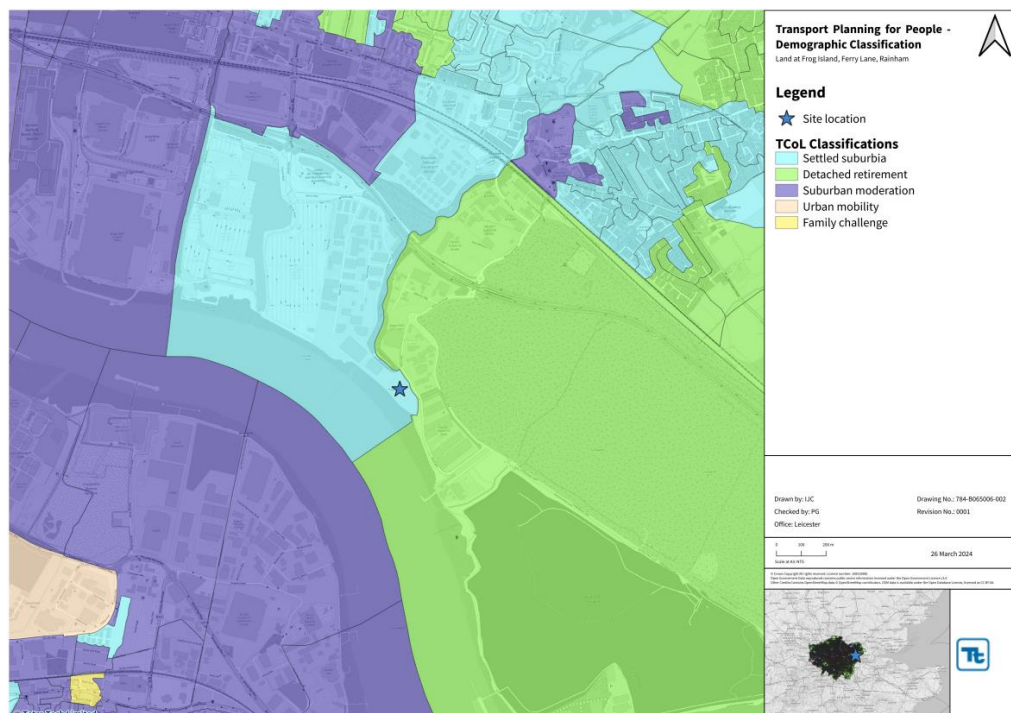
Affordable Transitions	City Living	Detached Retirement	Educational Advantage	Family Challenge	Settled Suburbia	Students & Graduates	Suburban Moderation	Urban Mobility
0%	0%	57%	0%	0%	37%	1%	3%	1%

3.2.5 **Table 3-2** shows that the existing demographic within Havering can be identified broadly by the following three segments: Detached Retirement (57%), Settled Suburbia (37%), and Suburban Moderation (3%).

### 3.3 TRANSPORT CLASSIFICATION AROUND THE SITE

3.3.1 TCoL also provides further information in the form of mapping, indicating the areas in which certain demographic segments are most prevalent. The demographic segment mapping allows for a further level of understanding of more local demographics. **Figure 3-1** indicates the demographic segments that currently occupy the area surrounding the Site.

**Figure 3-1: Demographic Segments - Site Specific**



3.3.2 **Figure 3-1** shows that the site is located primarily within Settled Suburbia area. The surrounding area consists of Detached Retirement and Suburban Moderation. The noted and identified demographics are considered to have high car use and below average level of change, this leads to the assumption that the site has high car usage, with very few alternative travel options.

3.3.3 Due to the nature of Detached Retirement and the site being one of employment, it is concluded that the Detached Retirement demographic does not contribute towards the overall impact of person trips to the site due to those demographics not being in employment.

### **3.4 EMPLOYEES AT THE SITE**

---

3.4.1 The site is in operation as a waste management facility importing, processing and exporting construction waste materials. The presumed travel demographic patterns of the employees are discussed briefly below.

3.4.2 According to the 2011 Census, the people working in the London Borough of Havering live in many areas of London, and the top five boroughs of residence are Havering (67%), Barking and Dagenham (14%), Redbridge (8%), Newham (3%) and Waltham Forest (2%).

3.4.3 It is therefore expected that most employees at the site will live in the five London boroughs stated above. These five boroughs have been assessed in terms of the Transport Classification of Londoners report:

- Amongst the residents of Havering, the largest segment is Detached Retirement, at 57%; however, as discussed previously, this demographic has been discounted for the reasons discussed earlier and therefore Settled Suburbia is the largest segment, at 37%.
- Amongst the residents of Barking and Dagenham, the largest segment is Suburban Moderation, at 63%.
- Amongst the residents of Redbridge, the largest segment is Family Challenge, at 32%.
- Amongst the residents of Newham, the largest segment is Affordable Transitions, at 58%.
- Amongst the residents of Waltham Forest, the largest segment is Students & Graduates, at 26%.

3.4.4 Havering and Barking and Dagenham make up 81% of people who work within Havering. These boroughs and their respective demographics suggest high car usage, which is likely for commuting trips to places of employment; therefore, it is correct to assume that most trips to the site will be by vehicles. This is further demonstrated by the PTAL score of '0', which suggests there are no bus and rail services within 640m and 960m walking catchments, respectively, which increases the likelihood of employees driving to the site. This is evident by the existing site operations which are discussed in the next section.

## 4 EXISTING CONDITIONS

### 4.1 EXISTING SITE

- 4.1.1 As previously mentioned, the site is in operation, and it is occupied by GRS. As shown in **Appendix A** the site is located on a parcel of land to the west of Ferry Lane known as Frog Island. To the north, the site is bound by industrial units and the River Ingrebourne. To the west of the site is the River Thames. To the east the site is bound by Ferry Lane and to the south, greenspace.
- 4.1.2 Ferry Lane bounds the site to the east and is aligned in an approximate north-south direction. Ferry Lane connects with Coldharbour Lane to the south and Ferry Lane / Coldharbour Lane roundabout to the north. Following the road from the Coldharbour Lane roundabout, Ferry Lane connects to dumbbell roundabouts providing access to the A13 via slip roads, where the speed limit transitions to the National Speed Limit. There are a few additional industrial units along Ferry Lane of which provide vehicular access to their respective sites. The speed limit within the site is 10mph.
- 4.1.3 The site access from Ferry Lane is shown in **Figure 4-1**.

**Figure 4-1: Existing Site Access**





## 4.2 EXISTING SITE OPERATIONS

---

- 4.2.1 The site is used for the importation, storage, recycling, and crushing of waste inert building materials as well as devanning containers, screening and sizing aggregate. In addition to the material being processed, there is building products stored on site.
- 4.2.2 A brief description of the typical day-to-day site operations consist of, crushing and screening hard waste from construction and road arisings, sizing and removing of light fractions from non-hazardous soil and stones, as well as breaking of large concrete lumps to remove unwanted steel elements from materials.
- 4.2.3 The site benefits from a wheel washing facility. The automated drive-through wheel wash system is designed for cleaning the wheels of vehicles as they drive through. It helps to remove dirt, mud, and other contaminants from the wheels, improving overall cleanliness. There is also an extra rumble strip to aid the wheel wash to shake of any excess water or muck.
- 4.2.4 All HGVs carrying loose material are sheeted before they leave the site to avoid the spread of dust and debris. Most vehicles have an automated sheeting system.
- 4.2.5 The average yearly throughput of material being imported and exported from the site is circa 200,000 tonne per annum. The types of materials that are being imported and exported are concrete, non-hazardous soil and stones. All movements are back hauled i.e. a wagon leaving the site will also return with a full load.
- 4.2.6 Material is transported using 18t – 25t HGVs. Plant, equipment or construction material is also transported using HGVs.

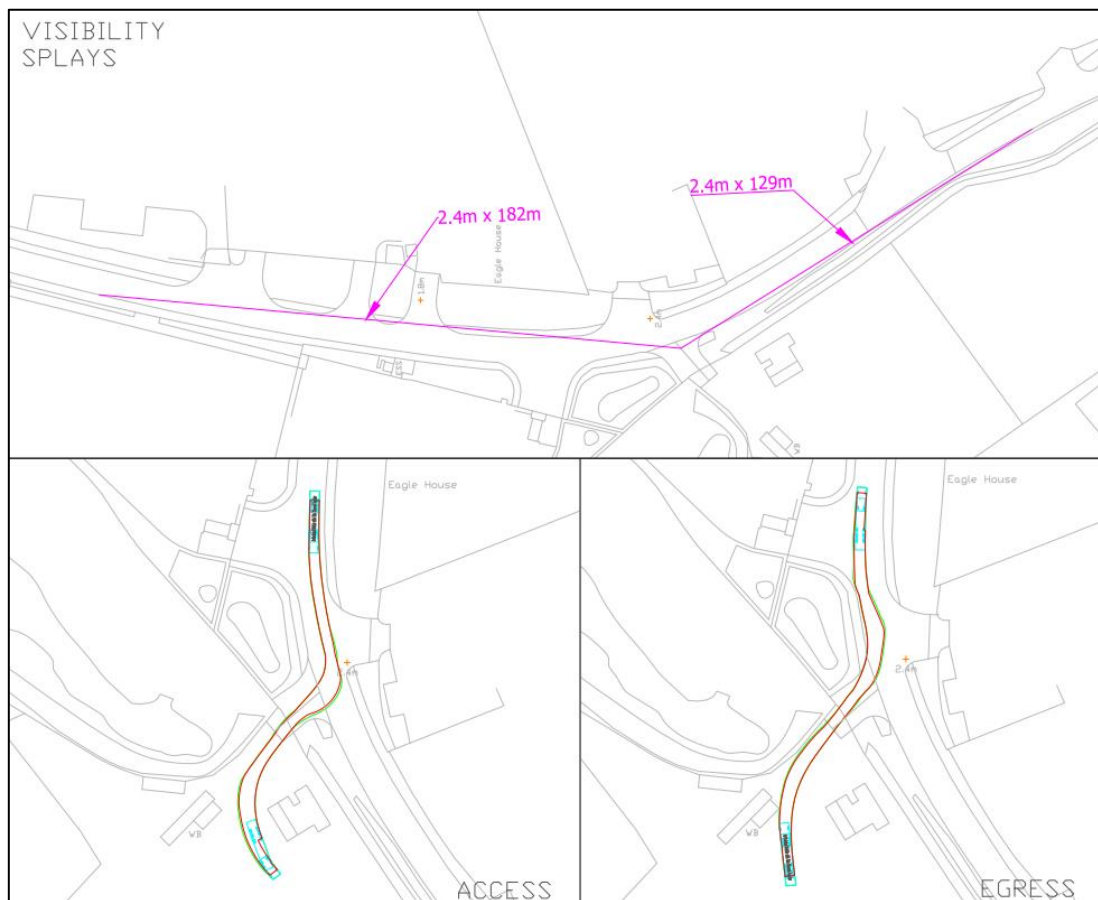
## 4.3 SITE ACCESS

---

### Vehicles

- 4.3.1 Vehicular access into the site is provided by the existing simple priority junction onto Ferry Lane. The priority junction provides access only to users of the site and the access does not connect to any other units other than GRS. An electronic barrier is in operation and the main site entrance is gated, which is left open during operational hours for ease of movement.
- 4.3.2 **Figure 4-2** demonstrates that a 16.5m articulated vehicle can satisfactorily enter and egress the site without conflicting with the surrounding highway network. **Drawing number B065006-TTE-00-ZZ-DR-S-001** contained in **Appendix C** provides the full output of the vehicular swept-path analysis and shows the site access arrangement.

**Figure 4-2: Swept Path Analysis – 16.5m Articulated HGV & Visibility Splays**



4.3.3 The existing simple priority access junction onto Ferry Lane achieves and exceeds the desired minimum visibility splays in accordance with DMRB CD109, Table 2.10 (2.4m x 70m for roads subject to a 50kph (30mph) design speed). It is worth noting that the observed speed of vehicles travelling along Ferry Lane exceed the speed limit near the site. The observed 85<sup>th</sup> percentile speeds from the Automatic Traffic Count (ATC) was 36mph (58kph). In accordance with DMRB, the desired minimum visibility splay based on 60kph is 2.4m x 90m. Drawing number **B065006-TTE-00-ZZ-DR-S-001** contained in **Appendix C** demonstrates that the required side road visibility splays of 2.4 x 90m are available.

4.3.4 The site access has the following key characteristics.

- Approximate 6.0m carriageway width.
- Approximate 5m radii on the entry and 10m on the exit.

4.3.5 The access is an established junction that is regularly used by HGVs without any known issues. This was confirmed by on-site observations indicating that HGVs can access and egress the site satisfactorily without impacting other road users. The only point to note, is that the existing road markings have started to fade, and it is recommended that they are refreshed soon. No improvements are required to the geometry of the existing junction.

## Pedestrians

4.3.6 Pedestrians will gain access to the development via the same route as vehicular traffic.

## 4.4 STAFF NUMBERS AND SHIFT TIMES

---

4.4.1 GRS has confirmed that 70 employees are working at the existing site. There are approximately three visitors a day.

4.4.2 GRS has also provided an indication of typical working times based on existing operations. A summary is provided as follows.

- Weekdays – 05:00hrs to 20:00hrs.
- Weekends – 06:00hrs to 17:00hrs.
- Some nights depending on certain works on highways and ship discharging.

## 4.5 CAR AND CYCLE PARKING

---

4.5.1 A large section of unmarked parking space is provided for HGVs and staff / visitors to park their vehicles within the site. The location of these parking spaces can be seen in **Appendix A** and **Figure 4-3** demonstrates the existing staff / visitor car parking spaces.

4.5.2 As outlined within LB Havering 2016 – 2031 Local Plan, parking provision and design is based on London Plan maximum standards across the borough and as such “*Car parking for development should aim to strike an appropriate balance between meeting the essential parking needs of the site whilst neither acting as a discouragement to using public transport nor adding to demand for on-street parking.*”

4.5.3 Paragraph 10.6.5 (Policy T6 of the London Plan) states that ‘*where no standard is provided, the level of parking should be determined on a case-by-case basis taking account of Policy T6 Car parking.....*’. The provided car parking area is appropriate for the site use and there is sufficient vehicle parking provision such that there are no detrimental impacts on on-street parking.

4.5.4 Three car parking spaces closest to the site offices are also kept clear as wider spaces for blue badge users. This accords with the requirement in Policy T6 to provide 5% blue badge spaces (5% of 48 observed vehicles parked on site).

4.5.5 There is sufficient space in the staff welfare area to provide secure and sheltered cycle parking to accommodate five cycles. However, this can be easily extended should there be additional demand.

Figure 4-3: Unmarked Staff / Visitor Car Parking



## 4.6 SERVICE AND EMERGENCY VEHICLES

---

- 4.6.1 Service and emergency vehicles will gain access to the development via the same route as other vehicular traffic, from Ferry Lane. There are approximately five servicing vehicles daily.

## 4.7 CAR PARK ACCUMULATION

---

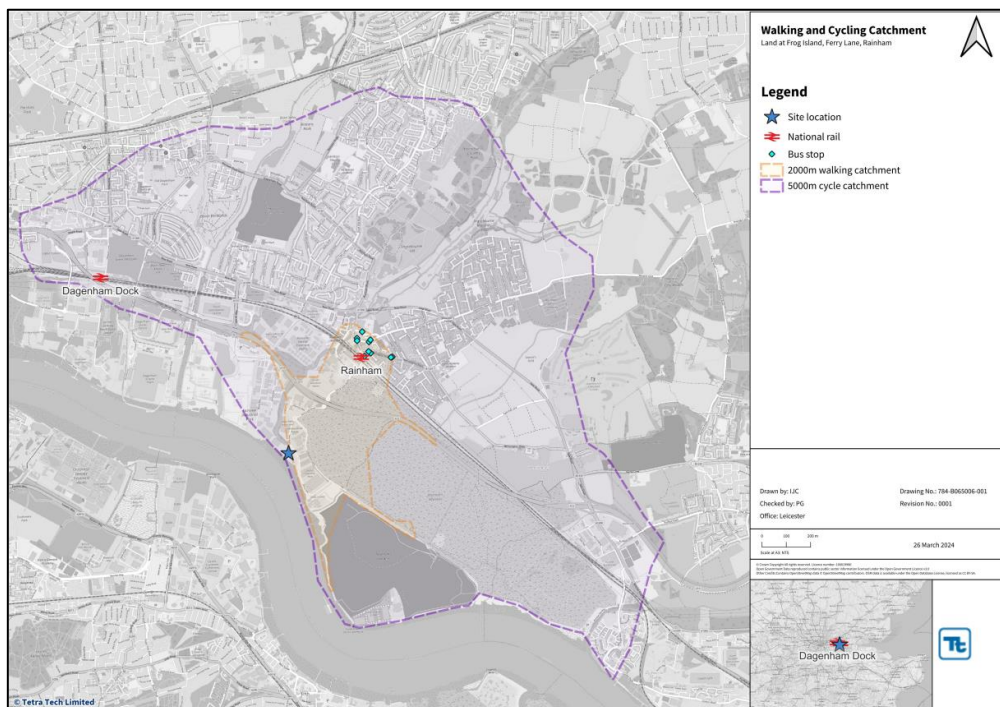
- 4.7.1 Car and LGV vehicle trips were recorded as part of the Junction Turning Count survey, as detailed later in **Section 4.15**. The survey recorded the movements of all vehicles, split by vehicle classification between 0700-1900hrs; however, it is worth noting that most employees arrive at the site before 0700hrs and therefore there is some discrepancy with the car park accumulation which results in a negative number in certain time periods. Observations during a site visit recorded a total of 48 vehicles parked at the site at 1130hrs.

## 4.8 WALKING AND CYCLING CATCHMENT PLAN

---

- 4.8.1 A walking and cycling catchment plan can be seen in **Figure 4-4**. The plan shows a 2km and 5km walking and cycling catchment from the site access, respectively. Further details follow this section.

**Figure 4-4: Walking and Cycling Catchment Plan**



## 4.9 PEDESTRIAN ACCESSIBILITY

### Pedestrian Infrastructure

- 4.9.1 Continuous footways are provided alongside the eastern side of Ferry Lane (see **Figure 4-5**). There are no footways provided south of the site on the west side of Ferry Lane. Dropped kerbs are paired with tactile paving at desire-line crossing points throughout. Good street lighting facilities and wayfinding is also provided throughout. This provision is continued in a northbound direction.
- 4.9.2 Several pedestrian refuge islands are present on Ferry Lane, typically at the roundabout junctions, throughout. Bollards can also be found along the footways; this is to prevent vehicles from parking on the footways and offers further segregation. The footways are shared with cyclists throughout the industrial estate and although the bollards provide an overall benefit to the area, these mitigations also reduce the footway width and could present difficulties if a pedestrian and cyclist were to pass each other.
- 4.9.3 Pedestrian connectivity via the Rainham Marshes Nature Reserve (RMNR) considerably improves with continuous, segregated footways and cycleways linking with a dedicated bridge to Rainham station to the north and to Purfleet-on-Thames in an eastbound direction.
- 4.9.4 Signalised Toucan crossing facilities are present at the Ferry Lane / A13 dumbbell roundabout junctions, providing a facility to ease the crossing of the road. The crossings are located on the southern roundabout at the eastern arm off-slip road and the eastern arm of the northern roundabout at the on-slip road.



Figure 4-5: Footways on Ferry Lane



#### Rainham Marshes Nature Reserve

- 4.9.5 RMNR is located to the north of the site. The nature reserve provides a network of foot and cycle paths with numerous access points along Ferry Lane and Coldharbour Lane. Alternative routes through RMNR can be used to link between the bridge serving Rainham railway station and the town centre, which is located to the north of the site. **Figure 4-6** demonstrates what a typical pathway looks like within the nature reserve.

**Figure 4-6: Rainham Marshes Nature Reserve - Shared Walking & Cycling Path**



#### **Pedestrian Catchment Area**

- 4.9.6 In accordance with PTAL, the site scores '0' which indicates poor public transport connectivity; however, this is within TfL's parameters for connectivity of 640m (eight-minute walk time) to bus services and 960m (12-minute walk time) to rail services. Due to the site location and the surrounding industrial area, it is considered appropriate to provide reasonable adjustments to these walking catchments to key public transport services.
- 4.9.7 In terms of what constitutes a reasonable walking distance it is necessary to consider what is realistic for a walking trip. The Institution of Highways and Transportation (IHT) document 'Guidelines for Providing for Journeys on Foot' (2000) states that "walking accounts for over a quarter of all journeys and four fifths of journeys less than one mile". The document also provides guidance on acceptable walking distances and suggests that a preferred maximum walking distance of 2km is applicable for commuting.
- 4.9.8 It can therefore be concluded that distances up to 2km can be considered reasonable to be undertaken on foot, and that walking is a realistic mode to consider for trips within this distance. Whilst this does not preclude pedestrians from undertaking longer journeys, it is considered that 2km is reasonable. Based on an average walking speed of 1.4 m/s it can be concluded that a 2km walk will take approximately 24 minutes.

- 4.9.9 A 2km catchment from the site's access is shown in **Figure 4-4**. The catchment demonstrates that Rainham railway station and numerous bus stops in its proximity can be reached within the 2km walking catchment of the site. The walking catchment also covers a few residential properties and amenities.

#### **Access to Amenities**

- 4.9.10 Rainham town centre is the nearest location from the site to access amenities such as retail and other conveniences. The town centre is approximately 1.7km walking distance north of the site and provides access to food establishments, convenience stores and a Tesco supermarket.

## **4.10 CYCLIST ACCESSIBILITY**

---

### **Cycle Infrastructure**

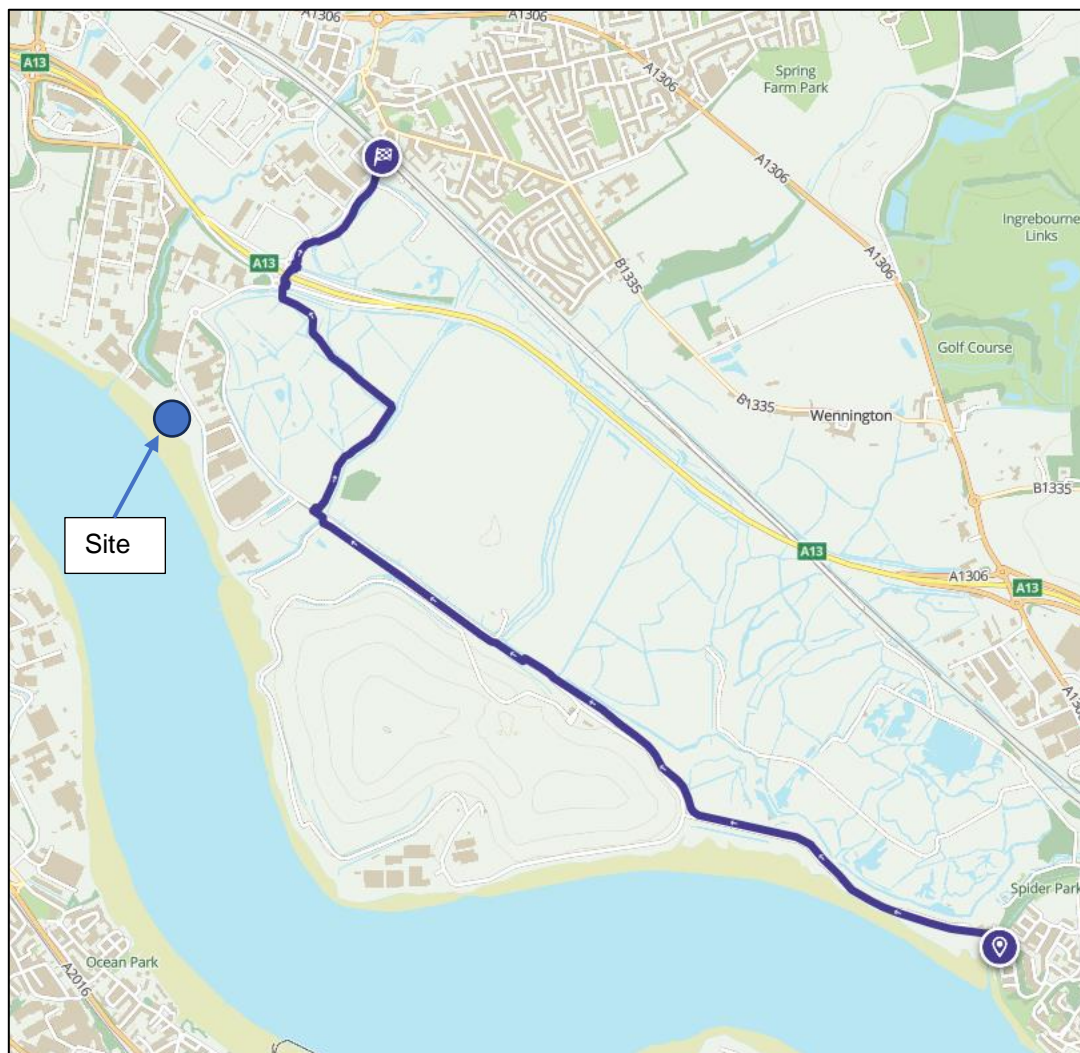
- 4.10.1 There are no formalised on-road cycle facilities along Ferry Lane near the site however, cyclists are permitted to share the footway with pedestrians. Appropriate signage is in place to demonstrate this and to the south of the site on the northern side of the road, the footway is marked showing segregation between pedestrians and cyclists. This route connects with National Cycle Network 13 (NCN 13), which is detailed below.

### **National Cycle Network**

- 4.10.2 NCN 13 is a traffic-free and scenic route that connects Rainham station to Purfleet. The route is approximately 5.8km in length and can be completed within a 20-minute cycle time. The site can connect with the NCN either by following the road to the south and connecting with Coldharbour Lane or in a northbound direction following the footway on the eastern side of the road until reaching the southern roundabout of the Ferry Lane dumbbell roundabouts.



**Figure 4-7: NCN 13 Route**



Source: Sustrans with Tetra tech annotations

### Cycle Catchment Area

- 4.10.3 In a similar way to pedestrian trip lengths, the length of cycling trips will be governed by the routes that are available and trip length, although several factors often mitigate for or against making these trips.
- 4.10.4 Local Transport Note 2/08 'Cycle Infrastructure Design' (DfT, 2008) states that "*many utility cycle journeys are under three miles... although, for commuter journeys, a trip distance of over five miles is not uncommon*". It can therefore be concluded that 3 miles, which is equivalent to approximately 5km, represents a reasonable typical cycling distance.
- 4.10.5 **Figure 4-4** shows a 5km catchment from the site's access. The 5km catchment includes Rainham, South Hornchurch, Wennington, Rainham station and Dagenham Dock station. The 5km catchment also includes some of Dagenham and Purfleet-on-Thames. Cycling should be encouraged as an appropriate mode of travel for local trips however, based on **Chapter 3** and the demographic identified for the local area, nearby residents have high car use with a below average level of change.

## 4.11 PUBLIC TRANSPORT ACCESSIBILITY

### Public Transport Accessibility Level

4.11.1 As per **Paragraph 4.9.6** and **4.9.7**, the PTAL score for the site is '0' indicating poor public transport accessibility therefore, due to the nature of the site and location, a 2km walking catchment has been instigated in accordance with IHT document 'Guidelines for Providing for Journeys on Foot' (2000), which suggests that a preferred maximum walking distance of 2km is applicable for commuting. The following bus and rail services chapters are in line with the 2km walking catchment.

## 4.12 BUS SERVICES

4.12.1 The nearest bus stop to the site is shown in **Figure 4-8**. The nearest bus stop is located at Rainham railway station, Celtic Farm Road at bus stop: Rainham Interchange (Stop N), approximately 1.6km northeast of the site access. The bus stop comprises of a bus flag, timetable information, and a public bin; shade and shelter are also provided near the bus stop, created by the building awnings. The bus stop provides access to bus services 103 and 372. Bus service, routes and frequencies captured within the 2km walking catchment are detailed within **Table 4-1**.

**Figure 4-8: Bus Stop (Stop N) - Nearest to Site**



**Table 4-1: Summary of Bus Services with 2km Walking Catchment**

Service	Bus Stop	Mon - Fri Frequency			Sat Frequency	Sun Frequency
		0600 -0700 hrs	0700 -1900 hrs	1900 -2000 hrs	0900-1800 hrs	0900-1800 hrs
103 (Rainham Interchange - Chase Cross)	N	6	6	4	6	3
103 (Chase Cross - Rainham Station)	N	6	6	4	6	3
372 (Hornchurch Town Centre – Lakeside Bus Station)	N	3	3	3	3	2
372 (Lakeside Bus Station – Hornchurch Town Centre)	N	3	3	3	3	2
165 (Abbey Wood Lane – The Brewery)	C	5	5	5	5	3
165 (The Brewery - Abbey Wood Lane)	F	4	5	5	5	3
287 (Abbey Wood Lane - Barking Station)	C	4	4	4	4	3
287 (Barking Station - Abbey Wood Lane)	F	4	4	4	4	3

4.12.2 As shown in **Table 4-1** there are four bus services that stop within the 2km walking catchment.

The most frequent bus route is route 103; this route connects with Rainham station and Chase Cross whilst visiting numerous key destinations such as, Dagenham East station and Romford station, which provide a link to underground, overground, Elizabeth line and National Rail services, providing connections further afield. Bus route 103 operates Monday to Saturday with an approximate frequency of one bus every 10-15 minutes, and one bus every 20-minutes on Sunday.

4.12.3 The other bus services operate throughout the week and provides a good frequency of services and multiple key connecting destinations during the peak and interpeak hours, when employees are likely to travel to / from the site.

4.12.4 Travel by bus is therefore a genuine alternative to the private car and should assist in encouraging a modal shift away from the private car.

## 4.13 RAIL SERVICES

4.13.1 The nearest train station is Rainham which is located approximately 1.6km northeast of the site. Trains operate throughout the day to destinations including Grays, London Fenchurch Street, Limehouse, West Ham, Barking, Pitsea and Leigh On Sea for peak commuter travel as well as shift work and other associated journeys (i.e., underground, and additional bus services). **Table 4-2** shows the first and last weekday trains, including approximate frequency per hour at Rainham station.

**Table 4-2: Summary of Train Services Operating from Rainham railway station**

Rainham Station	Rail Line Operator	AM Peak Hour Frequency	PM Peak Hour Frequency	First Train	Last Train
Weekday	City to Coast (c2c)	6	7	0505 hrs	0047 hrs
Weekend		4	4	0531 hrs	2333 hrs



- 4.13.2 As seen in **Table 4-2**, there are approximately four to six trains during the AM peak period over the weekend and weekdays, respectively. As for the PM peak period, there are between four to seven trains over the weekend and weekdays, respectively. A typical hour period outside of the AM and PM periods has a frequency of approximately four trains per hour during the weekday and at weekends.
- 4.13.3 Travel by train therefore provides a genuine alternative to the private car and should assist in encouraging a modal shift away from the private car.

## 4.14 HIGHWAY NETWORK

---

- 4.14.1 Ferry Lane is a single carriageway road subject to a 30mph speed limit that provides two-way vehicular movement in a northbound / southbound direction. **Figure 4-9** and **Figure 4-10** shows Ferry Lane from GRS site access. There is a lay-by on Ferry Lane, to the south of the site, where on-street parking is permitted. Ferry Lane, which bounds the site to the east, connects with Coldharbour Lane to the south and Ferry Lane / Coldharbour Lane roundabout to the north. Ferry Lane continues north and connects to the Ferry Lane dumbbell roundabouts and provides access to the A13 via slip roads.
- 4.14.2 Coldharbour Lane runs in an east and west direction and is subject to a 30mph speed limit. Footways run along the southern side of the network and are shared with cyclists. Crossing points are paired with dropped kerbs and tactile paving. Coldharbour Lane has speed cushions, which help mitigate any speeding that may occur.
- 4.14.3 The A13 is a major road that stretches 68km from Central London at the junction with the A11 in Aldgate through to Shoeburyness in southeast Essex. The road connects with Dagenham, Barking, and Stratford to the west and Grays, Tilbury, and Standford-le-Hope to the east as well as Junction 30 of the M25.

### Parking Restrictions

- 4.14.4 Double yellow line parking restrictions apply throughout the industrial estate, which prevent stopping at any time. To further mitigate the potential of on-street parking in the industrial estate, bollards are provided along footways on most roads.

Figure 4-9: Ferry Lane (view to the south of the site)



Figure 4-10: Ferry Lane (View to the north of the site)



## 4.15 BACKGROUND TRAFFIC FLOWS

4.15.1 Traffic data has been obtained and is presented in **Appendix D**. The following traffic surveys were undertaken at the site access as discussed with LBH:

- A 24-hour, seven-day Automatic Traffic Count (ATC) was installed on Ferry Lane adjacent to the existing site access. The ATC was installed on Sunday 17<sup>th</sup> March 2024 however, the pneumatic tube was damaged on two occasions. Meaningful data was collected for the period between Tuesday 19<sup>th</sup> March 2024 and Thursday 21<sup>st</sup> March 2024.
- To supplement the ATC, a 12-hour junction turning count (JTC) survey was also undertaken at the site access with Ferry Lane on Tuesday 19<sup>th</sup> March 2024.
- A peak period JTC was also undertaken at the A13 dumbbell junction on Tuesday 19<sup>th</sup> March 2024.

4.15.2 Further details of the traffic surveys can be seen in **Appendix D**.

## 4.16 COLLISION ANALYSIS

4.16.1 Personal Injury Collision (PIC) has been obtained from the cyclestreets.net 'Bikedata', which displays collision data provided by Department for Transport (DfT) that is publicly available. The dataset for the most recently available five-year period between 2018 and 2022 has been interrogated. The study area comprises of the entirety of Ferry Lane, up to the junction with Ferry Lane / Coldharbour Lane to the south of the site and Rainham railway station to the north. There were no recorded collisions near the site or the site access. None of the recorded collisions in the wider area involved HGVs.

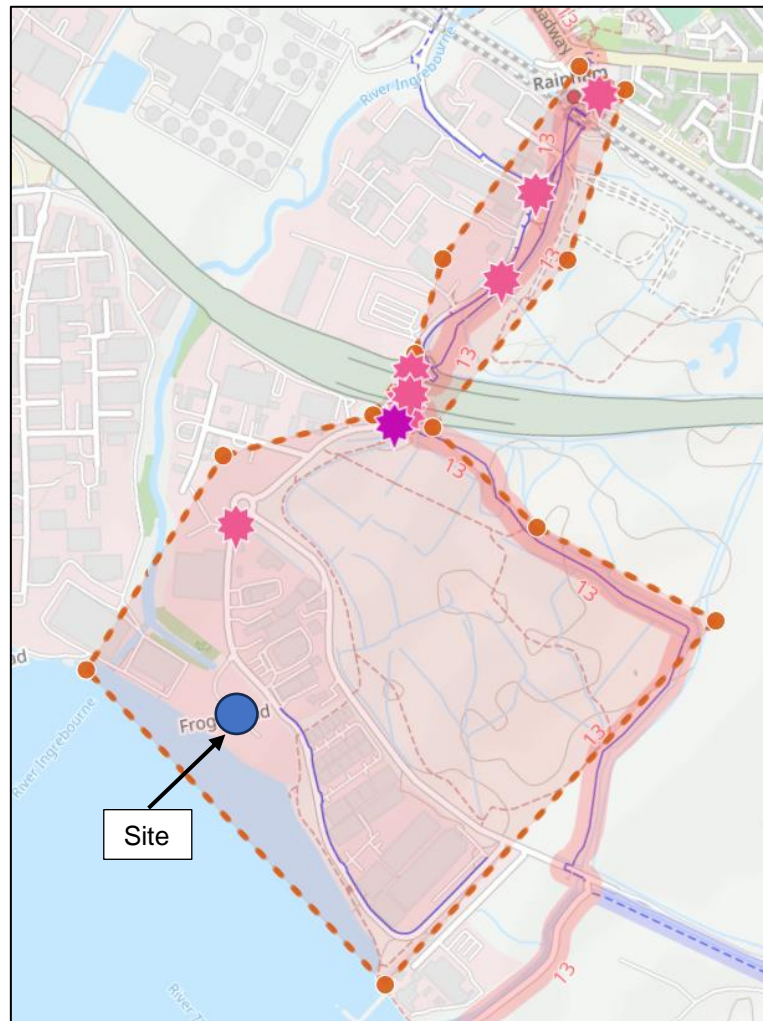
4.16.2 **Table 4-3** summarises the recorded PICs and the collision study can be seen in **Figure 4-11** on the next page.

**Table 4-3: Personal Injury Collisions 2018 to 2022**

Year	Severity			Total
	Slight	Serious	Fatal	
2018	1	0	0	1
2019	5	1	0	6
2020	1	0	0	1
2021	2	0	0	2
2022	0	0	0	0
<b>Total</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>10</b>



**Figure 4-11: PIC Study Area (2018 - 2022)<sup>1</sup>**



Source: OpenStreetMap contributors with Tetra Tech annotations

4.16.3 In total there were 10 collisions that occurred within the study area and of these, nine were slight in severity, and one was recorded as serious in severity. There were no recorded fatal collisions. A summary of casualties by severity is shown within **Table 4-4** indicating that the 10 collisions resulted in 16 casualties, including two pedestrian, one motorcyclist, one cyclist and 11 car occupants.

**Table 4-4: Casualties by Travel Mode**

Mode of Travel	Severity			Total
	Slight	Serious	Fatal	
Pedestrian	2	0	0	2
Cyclist	1	0	0	1
Motorcyclist	1	0	0	1
Car Occupant	11	1	0	12
LGVs	0	0	0	0
<b>Total</b>	<b>15</b>	<b>1</b>	<b>0</b>	<b>16</b>

<sup>1</sup> [bikedata.cyclestreets.net](http://bikedata.cyclestreets.net)

- 4.16.4 The nearest collision to the site occurred on the southern arm approach to the Ferry Lane / Coldharbour Lane roundabout, approximately 300m north of the site. A slight collision occurred on Saturday 18<sup>th</sup> May 2019 at 1430 hrs which involved a child pedal cyclist and an LGV. Both the cyclist and vehicle were moving northbound along the network, on the main carriageway. The weather conditions were fine with no high winds, during daylight hours and the road surface was dry. The collision occurred due to the driver failing to see the cyclist and as a result the child pedal cyclist sustained slight severity injuries.
- 4.16.5 A serious collision occurred on Sunday 22<sup>nd</sup> December 2019 at 0125 hrs which involved two cars. The collision occurred on entry to the southern dumbbell roundabout on Ferry Lane upon exiting the southern arm. At the time of the collision, the conditions recorded were raining with no high winds, dark with street lights illuminated, and the road surface was wet / damp. Both vehicles were exiting the junction and the driver of vehicle one failed to predict / failed to see the movement of the second vehicle. Vehicle one made a manoeuvre leading to them colliding with the central island of the roundabout. The driver of vehicle one sustained serious severity injuries and the driver of vehicle two sustained slight injuries.
- 4.16.6 A cluster of five collisions occurred at the dumbbell roundabout on Ferry Lane. The collision severities are made up of one serious and four slight collisions, with the serious collision detailed above. The collisions are spread out in occurrence. As such, one collision occurred in 2018, three in 2019, and one in 2021. Within these respective years, the collision locations are dispersed across the dumbbell roundabouts and with further investigation the collisions occurred due to driver error and not due to any inherent deficiencies in the existing highway layout.
- 4.16.7 In conclusion, none of the recorded collisions involved HGV vehicles and no collisions occurred at or near the site access junction. The site access therefore operates safely. It has also been established that there are no existing road safety problems on the local highway network that are likely to be exacerbated by use of the site, especially as that the site is already in use and associated vehicle movements are already present on the highway network.

## 5 ACTIVE TRAVEL ZONE ASSESSMENT

### 5.1 INTRODUCTION

---

- 5.1.1 This Active Travel Zone (ATZ) assessment has been carried out in line with TfL Transport Assessment guidance. It aims to show how the site supports Vision Zero and Healthy Streets policies.
- 5.1.2 It is not expected that the developer will need to contribute to or implement improvements that are identified through the ATZ assessment. The improvements identified in this assessment could be investigated further and, if deemed appropriate, funded through CIL or s106 Obligation.
- 5.1.3 The key aim of the ATZ is to determine how people of all abilities can make key journeys that support car-free lifestyles. The ATZ is defined as a 20-minute cycle around the site.
- 5.1.4 The ATZ assessment is undertaken using three maps:
- **Map One:** The ATZ and all potential active travel destinations.
  - **Map Two:** Key active travel destinations and routes at a neighbourhood scale.
  - **Map Three:** Neighbourhood healthy characteristics check.
- 5.1.5 The ATZ maps 1, 2 and 3 are contained within **Appendix E**.

#### NEIGHBOURHOOD PHOTO SURVEY

- 5.1.6 The neighbourhood photo survey site visit was carried out on 09<sup>th</sup> April 2024 between 1000-1130 hrs. Throughout the site visit, consideration was given to how pedestrians and cyclists may feel about travelling via the key route including during the hours of darkness.

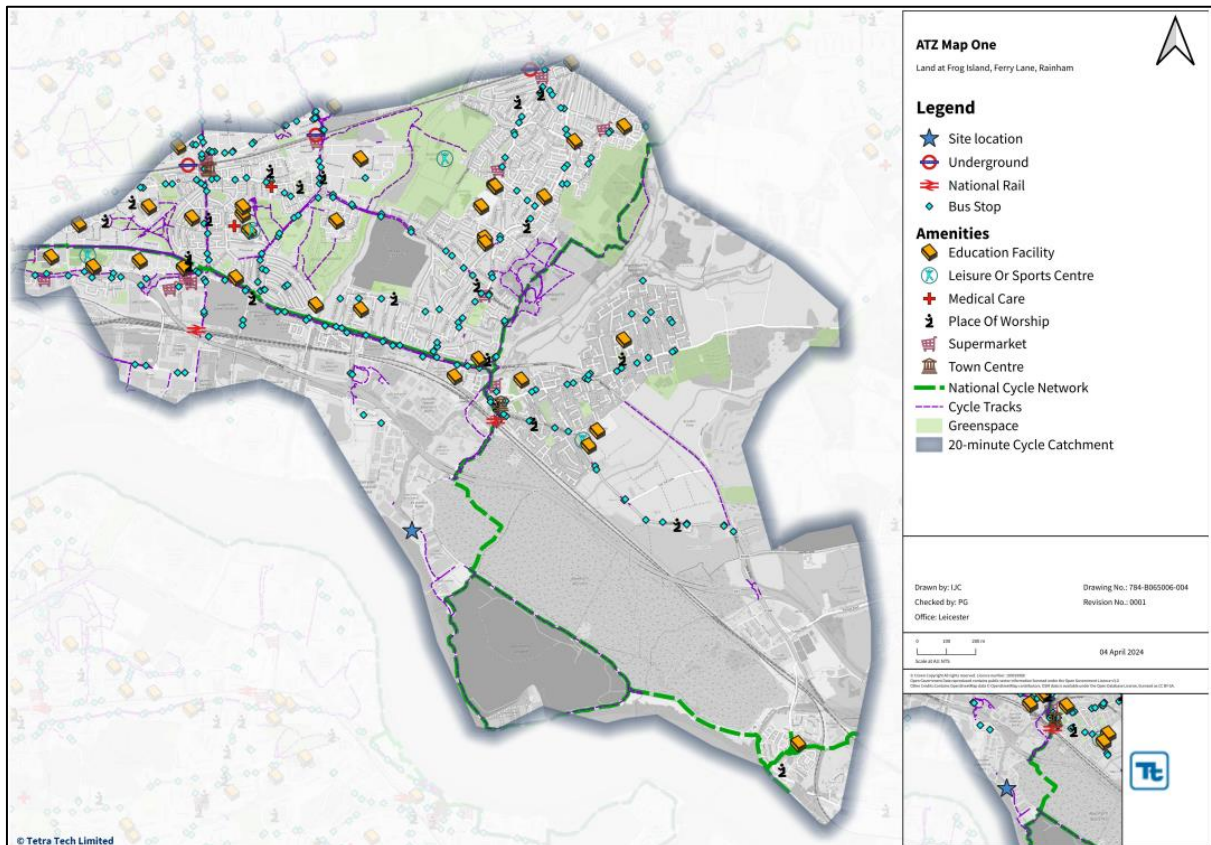
### 5.2 MAP ONE

---

- 5.2.1 Map one, shown in **Figure 5-1** displays all key destinations within a 20-minute cycle of the site, which are:
- Bus stops.
  - Public transport stations and piers.
  - Cycle network.
  - Town centres.
  - Parks / greenspace.
  - Schools / colleges.
  - Hospitals/doctors.
  - Places of worship.



**Figure 5-1: ATZ Map One**



5.2.2 **Figure 5-1** shows that key destinations and transport services deemed beneficial for employees of the site can be accessed within a 20-minute cycle catchment.

5.2.3 The map shows that multiple amenities and facilities are within a 20-minute cycle catchment; these include greenspaces, transport services (i.e. bus and rail, Underground), education facilities for all different age groups (schools, college and university), cycle networks, essential shopping, and places for leisure and worship.

5.2.4 The map above demonstrates that there is a potential for employees to travel via public transport and cycle the remaining distance and transition away from the use of private vehicles and adopt a car-free and active lifestyle.

## 5.3 MAP TWO

5.3.1 Map Two, shown in **Figure 5-2** prioritises key destinations within the ATZ. The site is an employment use so the site is expected to primarily generate walking trips between the place of work and rail stations / bus stops and cycle trips on the road network.

5.3.2 **Table 5-1** ranks the key destinations by priority (i.e. high priority destinations are expected to be used by a person daily).

**Table 5-1: ATZ Key Destination Prioritisation**

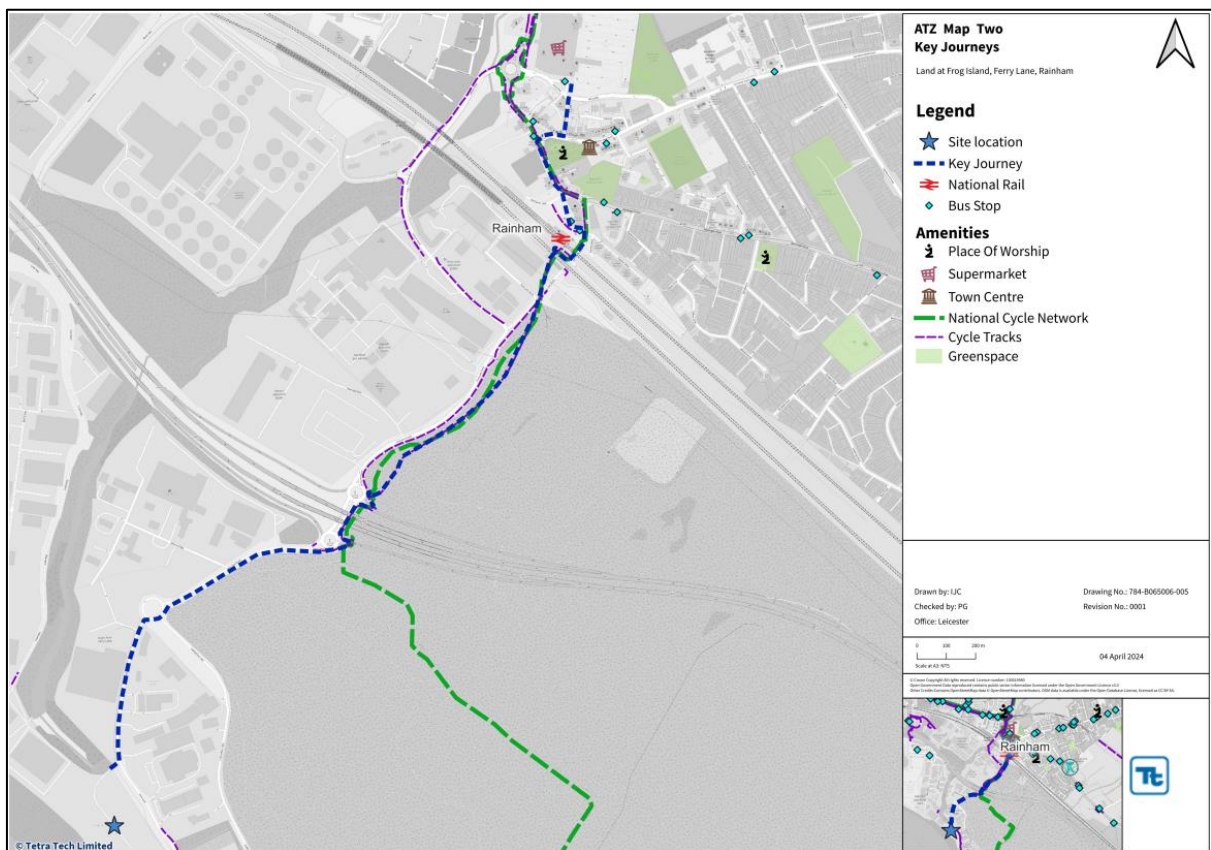
Key Destination	Priority	Justification
Underground / National Rail	High	High Underground / National Rail mode share is expected for employees travelling to / from the site. Underground / National Rail stops are therefore classified as 'high priority'. The nearest station to the site is Rainham that provides access to the National Rail.
Bus stops	High	The development site is situated near several bus stops which provide access to local bus routes. Bus stops are a high priority destination, as it is expected a significant proportion of employees will use buses as they travel to / from the site.
Cycle Network	High / Medium	The cycle network will allow employees of the site to access local facilities easily using zero-emission, active travel. Therefore, the network is classified as a high / medium priority.
Education Facility	Low	It is not likely that an education facility will provide a benefit for employees; however, in the case that an employee requires an educational facility, there are a number of facilities within the 20-minute cycle catchment.
Greenspace	Medium	Green spaces near developments are key leisure and recreation spaces, encouraging activity and a place away from the workplace during breaks. Green spaces are considered a medium priority.
Medical Centre	Medium	As most people generally do not need to go to a medical care facility daily and people who do require medical care are less likely to be able to walk and cycle to this care, this category has been labelled as medium priority.

5.3.3 Walking and cycling routes were mapped to connect the site to its key destinations, as identified in **Table 5-1** which can be seen on Map Two, one key journey has been identified. Due to the site location, nature of the site, and access to local amenities and facilities typically taking 20-minutes' walk time to access; the site can access a National Rail station, bus stops, supermarkets, and other retail opportunities along this route.

5.3.4 The destinations have been grouped into the following routes:

- **Key Journey 1:** Tesco supermarket, Rainham town centre, Rainham railway station, bus stops, NCN and Rainham Marshes.

**Figure 5-2: ATZ Map Two**



## 5.4 NEIGHBOURHOOD HEALTHY CHARACTERISTICS

5.4.1 **Figure 5-3** shows Map Three, which shows the characteristics of a typical healthy neighbourhood, including the following.

- Street density
- Public Transport.
- Greenspaces.

### Street Density

5.4.2 The London permeable neighbourhood network layer has been interrogated and it suggests that the area surrounding the site is not permeable. There are multiple factors that determine if a street is classified as a permeable neighbourhood; however, a permeable neighbourhood is typically defined as a street layout that encourages walking and cycling in that it is well-connected and offers a choice of direct routes to all destinations. As assessed on the site visit, the key journey includes wide footways on both sides of the road, segregated footways and cycleways through Rainham Marshes, crossing facilities, and cycle routes. The site via the key route connects with NCN 13, which is mostly segregated from traffic towards Purfleet-on-Thames to the east and Rainham to the north.

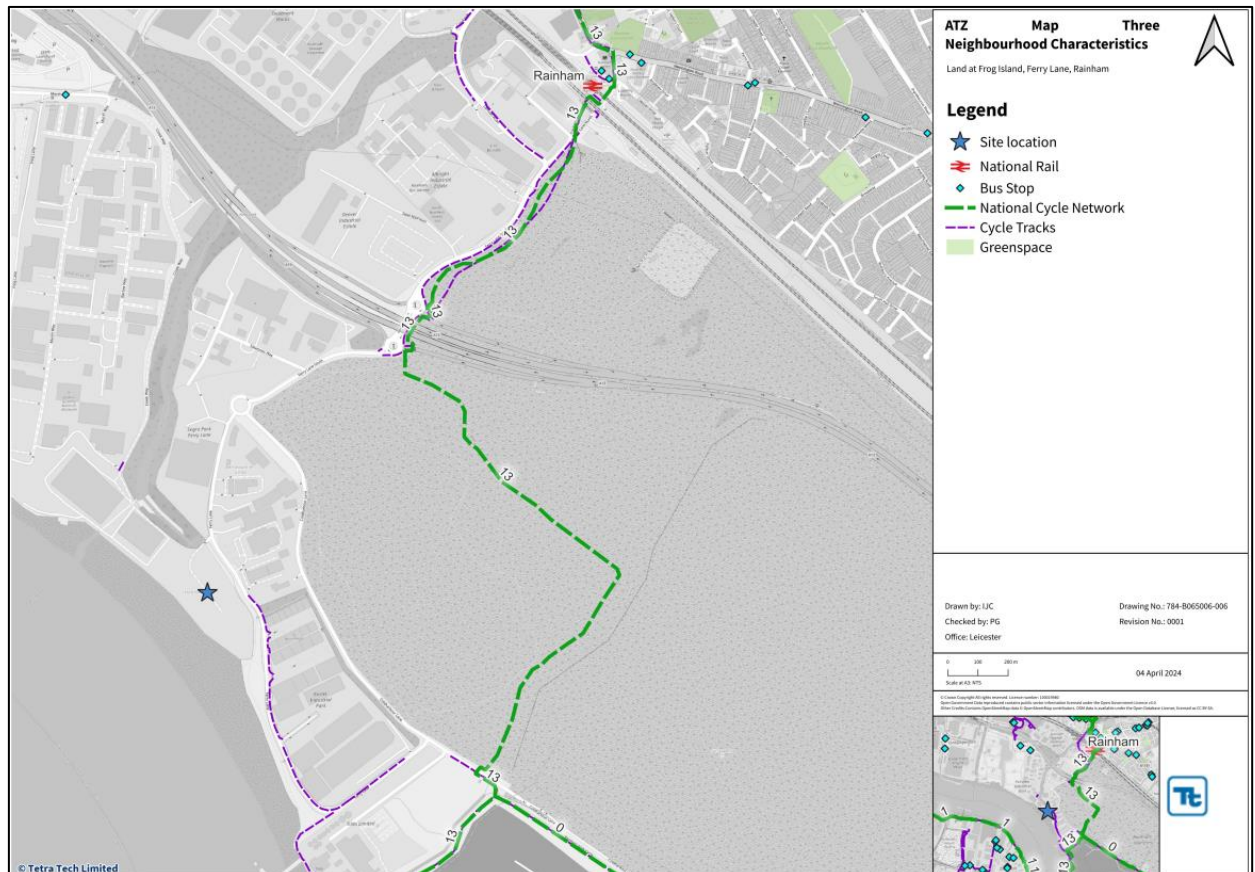
### Public Transport

5.4.3 As per **Paragraph 4.9.6** and **4.9.7**, the PTAL score for the site is '0' indicating poor public transport accessibility; therefore, due to the nature of the site and location, a 2km walking catchment has been instigated in accordance with IHT document 'Guidelines for Providing for Journeys on Foot' (2000), which suggests that a preferred maximum walking distance of 2km is applicable for commuting. On this basis, the site is located within an appropriate walking distance to four bus services and one National Rail station (Rainham).

### Greenspaces

5.4.4 In accordance with the London greenspace layer, greenspaces are situated north of Rainham station. Rainham Marshes, although not defined as greenspace, is within short walking distance east from the site and is an ideal location for walking or relaxing.

**Figure 5-3: ATZ Map Three**



## 5.5 HEALTHY STREETS CRITERIA

5.5.1 Each route has been reviewed and assessed against eight of the 10 Healthy Streets Criteria (criteria 3 – 10), in line with TfL's ATZ and Healthy Streets TA Guidance. The following eight criteria have been assessed.



- Easy to Cross.
- People feel Safe.
- Things to see and do.
- Places to stop and rest.
- People feel relaxed.
- Not too noisy.
- Clean air.
- Shade and Shelter.

## 5.6 KEY JOURNEY ASSESSMENT

---

- 5.6.1 As set out previously as part of this ATZ, one key route has been identified between the site and several key destinations within the site's ATZ. As per the ATZ guidance, a site visit was undertaken to assess the key route identified as part of the desk-based stages of the ATZ assessment. These routes have been walked and cycled to understand the quality of the most important active travel routes from the site. The site visit took place during 1000-1130 hrs 09<sup>th</sup> April 2024.
- 5.6.2 During the site visit, the worst point of the route was identified. 'Worst' is defined as that deemed to be the most unpleasant or potentially unsafe part of a route for pedestrians and / or cyclists.
- 5.6.3 Journey 1 connects the site with Tesco supermarket, Rainham town centre, Rainham railway station, bus stops, NCN and Rainham Marshes, as illustrated in **Figure 5-2**.
- 5.6.4 Overall, the journey provides good facilities and infrastructure for pedestrian and cyclist movement. The route, for the majority, provides wide footways, good crossing facilities which are paired with dropped kerbs and tactile paving, and connects with NCN 13. This route is approximately 2km in length and is connected to transport facilities, the cycle network, and local amenities. The route is considered towards the further end for people commuting in accordance with IHT document 'Guidelines for Providing for Journeys on Foot'. Due to the site being one of employment, this journey is deemed acceptable in length as it connects with multiple transport services toward Rainham (four bus services and one National rail station), which could potentially be used for commuting purposes. Some of the bus stops on route are provided with shelter, seating, timetable, public bin and bus flag, whilst Rainham station provides accessible facilities, seating, step-free access, sheltered two-tier cycle parking, public bin and a shop. The above amenities and facilities associated with this key journey are the closest to the site; however, the first accessible facility is Rainham station, which is approximately 1.6km north of the site, meaning all access options are approximately 20-minutes' walk time away.
- 5.6.5 The worst part along the key journey has been identified in **Figure 5-4**, which was at the northern dumbbell pedestrian crossing. The crossing tactile paving is covered in dirt which limits the available surface to assist visually impaired people across the road; there is also an

abundance of litter and debris near the crossing. It is recommended that regular general maintenance is provided to help with the perception of feeling relaxed. **Table 5-2** assesses the worst part of the route against eight of the 10 Healthy Streets criteria.

**Figure 5-4: Worst Point - Northern Dumbbell Pedestrian Crossing**



**Table 5-2: ATZ Assessment Journey 1 – Tesco Supermarket | Healthy Street Indicator Analysis**

Healthy Streets Indicator	Indicator Met?	Reasoning	Suggested Improvement
Easy to cross	Partly	This section provides a signalised pedestrian crossing however, the tactile paving is covered in dirt and debris potentially making it difficult for people with visual impairments to cross the road. It was also observed on the site visit that people were crossing the road to the west of the crossing passing behind the barrier.	General maintenance. Extending the barrier along the southern arm of the roundabout to reduce to likelihood of people crossing informally.
People feel safe	Yes	This section of the journey does feel safe, and appropriate lighting facilities are provided during darker periods. The road network here generally has low traffic movement, which heightens the perception of feeling safe.	N/A.
Things to see and do	Partly	This section lacks things to see and do; although the journey is assumed to be used as part of travel to go somewhere (i.e. commuting or leisure). Rainham Marshes Nature Reserve is located on the northern side of the road which provides a scenic route.	N/A.
Places to stop and rest	No	There are no places to stop and rest in the form of public seating however, it was observed on the site visit that people would sit on the metal railing at the underpass.	Although there is not enough room to provide public seating at this point, the footway at the underpass is wide and could accommodate formal public seating.
People feel relaxed	Partly	Wayfinding is provided. The crossing tactile paving is covered in dirt and debris which limits the available surface to assist visually impaired people across the road; there is also an abundance of litter and debris near the crossing.	General maintenance.



Not too noisy	Yes	The part of the route has low level of noise due to the low level of traffic produced here.	N/A.
Clean air	Yes	According to the London Air Quality Network, this section of the route passes the annual mean objective for NO2 air pollution.	N/A.
Shade and shelter	No	No shade and shelter are provided. The underpass to the south provides shade and shelter.	N/A.

## 5.7 ASSESSMENT NOTE

---

- 5.7.1 It is not expected that the developer will need to contribute towards or implement suggestions identified within this ATZ.

## 6 TRIP GENERATION AND DISTRIBUTION

### 6.1 TRIP GENERATION

- 6.1.1 This report has been prepared following an enforcement notice being served to S Walsh (operator at the time LBH served the enforcement notice). The site use and the trips associated with the site use are in operation and have been surveyed as set out in the earlier in this report. GRS has confirmed that the site will not increase the output of material and will not generate any new or additional vehicle trips. The existing trip generation has been recorded and calculated as part of the March 2024 traffic survey, of which site in / out vehicular movement has been identified, this includes vehicle classification. Due to the site access being only for GRS vehicles and employees, it is concluded that all vehicle movements at the site access are associated with the site.
- 6.1.2 The enforcement notice dated 18<sup>th</sup> July 2022 was for the alleged material change of use of the land from use for storage (B8) to a waste management facility importing processing and exporting waste materials. Therefore, a comparison of trips has been undertaken to compare the existing site against a B8 land use (i.e. warehousing (commercial)).
- 6.1.3 The observed trip generation from the traffic survey can be seen in **Appendix F**.

### 6.2 EXISITNG TRIP GENERATION

- 6.2.1 Existing trip generation as observed during the traffic flow surveys detailed in **Section 4.15** is set out in **Table 6-1** for the time period 0700-1900 hrs. As per the survey results, vehicles classified as OGV1 and OGV2 are HGVs in the table below, all other vehicle classifications are cars or LGVs.

**Table 6-1: GRS Site Existing Trip Generation**

Time Period	Inbound (HGVs)	Outbound (HGVs)	Inbound (Vehicles)	Outbound (Vehicles)
07:00-08:00	11	8	3	1
08:00-09:00	13	15	3	2
09:00-10:00	14	14	3	7
10:00-11:00	20	17	5	3
11:00-12:00	8	11	5	6
12:00-13:00	11	12	2	3
13:00-14:00	12	12	4	2
14:00-15:00	16	13	2	4
15:00-16:00	30	22	3	4
16:00-17:00	6	7	6	28
17:00-18:00	2	0	1	9
18:00-19:00	0	0	3	0
<b>Total</b>	<b>143</b>	<b>131</b>	<b>40</b>	<b>69</b>

### HGVs

6.2.2 As shown in **Table 6-1**, the site currently generates 274 HGV two-way movements during the 12-hour period recorded. As a 'worst-case' scenario, it is assumed that HGV movements typically take place over a 5-day week. Most HGV movements occur between 0700 - 1600 hrs with the highest hourly flow recorded between 1500 - 1600 hrs.

### Other Vehicle Movements

6.2.3 As shown in **Table 6-1**, there were 109 two-way car/LGV movements (approximately 55 arrivals and 55 departures) associated with the existing site. Most of these vehicle movements occur at the site between 1600 - 1700 hrs. Staff generally arrive before 0700 hrs.

### Total Trips

6.2.4 In total, the site generates 379 two-way vehicle movements per day over a 12-hour period.

### Summary

6.2.5 The site is already operational and operating at capacity and will be no expected uplift in vehicle movements. The above trip generation assessment is therefore deemed to accurately reflect the existing and future situation.

## 6.3 WAREHOUSING (COMMERCIAL) (B8) TRIP GENERATION

---

6.3.1 A comparison has been undertaken between the existing vehicle trip generation and the trip generation that could be expected from a B8 land-use on the site to quantify the potential traffic impact of the alleged unlawful land-use.

6.3.2 The trip generation for a B8 land use has been calculated using trip rates derived from the industry standard TRICS (v7.11.1) trip rate database. Where possible, survey sites have been identified and selected which share similar characteristics to the site in terms of size, location and accessibility.

6.3.3 The following TRICS site selection criteria have been used to identify survey sites with similar characteristics to the use for storage (B8), in accordance with best practice:

- Employment – Warehousing (Commercial)
- Multi-modal total vehicles
- Sites in Greater London only
- PTAL score of '2' or less

6.3.4 A total of three survey sites were identified using this criteria, and the sites selected had a greater breakdown of site operations for storage and distribution, general industrial and light

industrial. The resulting HGV and other vehicle inbound / outbound trip generation for a typical daily profile is detailed in **Table 6-2**.

**Table 6-2: B8 Trip Generation**

Time Period	Inbound (HGVs)	Outbound (HGVs)	Inbound (Vehicles)	Outbound (Vehicles)
07:00-08:00	1	1	8	3
08:00-09:00	1	1	12	3
09:00-10:00	1	1	7	4
10:00-11:00	1	1	5	5
11:00-12:00	1	1	7	7
12:00-13:00	1	1	7	8
13:00-14:00	1	1	7	6
14:00-15:00	1	1	4	5
15:00-16:00	1	1	5	6
16:00-17:00	1	1	5	7
17:00-18:00	1	1	5	13
18:00-19:00	1	0	5	8
<b>Total</b>	<b>13</b>	<b>13</b>	<b>77</b>	<b>76</b>

#### **HGVs**

6.3.5 As shown in **Table 6-2**, a B8 land-use would generate 26 HGV movements over 12-hours.

#### **Other Vehicle Movements**

6.3.6 As shown in **Table 6-2**, there are 153 two-way vehicle movements daily associated with the land use. Most of the other vehicle movements occur between 1700 - 1800 hrs.

#### **Total Trips**

6.3.7 In total, a B8 land-use generates 179 vehicle movements (approximately 90 arrivals and 89 departures).

## **6.4 NET DIFFERENCE**

---

6.4.1 The net differences between the existing site use and a B8 land-use is presented in the following tables.

**Table 6-3: Net Difference - HGV and Other Vehicles**

Time Period	Inbound (HGVs)	Outbound (HGVs)	Inbound (Vehicles)	Outbound (Vehicles)
07:00-08:00	10	7	-5	-2
08:00-09:00	12	14	-9	-1
09:00-10:00	13	13	-4	3
10:00-11:00	19	16	0	-2
11:00-12:00	7	10	-2	-1
12:00-13:00	10	11	-5	-5
13:00-14:00	11	11	-3	-4
14:00-15:00	15	12	-2	-1
15:00-16:00	29	21	-2	-2
16:00-17:00	5	6	1	21
17:00-18:00	1	-1	-4	-4
18:00-19:00	-1	0	-2	-8
<b>Total</b>	<b>130</b>	<b>118</b>	<b>-37</b>	<b>-7</b>

6.4.2 As shown in **Table 6-3**, there is a net increase of HGV vehicle movements associated with the existing GRS site when compared to a B8 land-use.

**Table 6-4: Net Difference - Combined HGV and Other Vehicle movements**

Time Period	B8 Warehousing (Commercial)		Surveyed GRS Site		Net difference	
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
07:00-08:00	9	4	14	9	5	5
08:00-09:00	13	4	16	17	3	13
09:00-10:00	8	5	17	21	9	16
10:00-11:00	6	7	25	20	19	13
11:00-12:00	8	8	13	17	5	9
12:00-13:00	8	10	13	15	5	5
13:00-14:00	9	8	16	14	7	6
14:00-15:00	5	6	18	17	13	11
15:00-16:00	6	7	33	26	27	19
16:00-17:00	6	8	12	35	6	27
17:00-18:00	6	14	3	9	-3	-5
18:00-19:00	6	8	3	0	-3	-8
<b>Total</b>	<b>90</b>	<b>88</b>	<b>183</b>	<b>200</b>	<b>93</b>	<b>112</b>

6.4.3 As shown in **Table 6-4**, there is a net increase when comparing the existing GRS site operation to a B8 land-use. Inbound and outbound total vehicle trips increase by 93 and 112 trips respectively. The highest notable net change is between 1500-1600 hrs with an increase of 27 inbound and 19 outbound trips. However, the impact is deemed to be negligible as demonstrated by the results of the junction capacity assessment. The site access junction has

no traffic capacity issues and satisfactorily accommodates vehicle trips associated with the existing fully operating site. Also identified within **Section 4.16** there are no road safety concerns.

### **Summary**

- 6.4.4 Overall, the uplift in vehicle trips when compared to a B8 land-use is deemed negligible and is not considered to result in any adverse impacts on the transport network.

## **6.5 TRIP DISTRIBUTION**

---

- 6.5.1 Trip distribution flow diagrams are presented in **Appendix G**. The flow diagrams illustrate the trip distribution associated with the existing operating site, with HGV distribution provided by GRS. All vehicles enter and exit the site to the west of the site access, with all vehicles travelling to / from the north along Ferry Lane. The trip distribution flow diagrams have been shown for the AM and PM peak periods.

### **HGVs**

- 6.5.2 As provided by GRS, all HGV trips will travel to / from the Ferry Lane / A13 dumbbell roundabout junctions and access the A13 in either direction.

### **Other Vehicle Trips**

- 6.5.3 The existing trip distribution for other vehicle trips are based on the top five boroughs of residence for employees that work at the site, as detailed **Chapter 3**, of which most of the journeys are to / from the east along the A13 with the remaining trips going to / from the north along Ferry Lane.



## 7 SUSTAINABLE TRANSPORT STRATEGY

### 7.1 INTRODUCTION

- 7.1.1 One of the most important aspects of achieving a sustainable development is ensuring that sustainable travel opportunities are in place at the outset. Employees should be advised of the alternative travel opportunities so that regular travellers establish sustainable travel behaviour.
- 7.1.2 A Travel Plan could be implemented through a planning condition.

### 7.2 SUSTAINABLE MEASURES

- 7.2.1 To encourage sustainable travel to and from the site and to reduce the use of single occupancy vehicles, it is key to inform employees (existing and future) of alternative ways to travel.
- 7.2.2 Several potential measures are set out below that could be implemented to reduce the number of employees who travel to and from the site via private, single occupant vehicles.

#### **Noticeboards**

- 7.2.3 A noticeboard could be provided to present walking and cycling maps for the area as well as local public transport information. It could also be used as facility to promote sustainable travel events / initiatives for employees. The noticeboard should be in an area which is highly trafficked by pedestrians to ensure that material is frequently viewed.

#### **Walking and Cycling**

- 7.2.4 To maximise the attractiveness of walking and cycling amongst employees, the following measures could be considered:
- Walking and Cycling Route Maps – these could be presented on the noticeboard and sent to individuals' emails for reference. The maps could include all relevant information on local walking and cycling routes and distances to key services and facilities.
  - Personalised Journey/Travel Planning – Employees could be provided with personalised travel planning advice. This could include information on the fastest route for accessing public transport services and stations.
  - Facilities for accessibility – The above service could also provide specific journey planning requirements to accommodate access for everyone travelling to the site.
  - Cycle Parking – cycle parking will be provided in accordance with the relevant standards.
  - Promotion of any cycle training and maintenance schemes and safe cycling practice.

## **Public Transport**

7.2.5 It is important to promote public transport use to employees, for it to be recognised as a viable alternative to private car use. Employees could be provided with a range of information regarding their public transport options. The material will likely include:

- Route maps.
- Location of nearby bus stops.
- Timetable information and fares.
- Promotion of public transport route planning websites.

7.2.6 Employees could be provided with timetable, route and fare information for local bus and rail services so that they are able to consider these options for both commuter and leisure journeys.

## **Car Sharing**

7.2.7 Car sharing has the potential to enable employees to save money, reduce stress and increase the opportunities for socialising. It provides a cost saving and reduces the number of single occupancy cars on the local road network, therefore alleviating congestion and providing a benefit to air quality.

7.2.8 It is understood that ad-hoc car sharing does take place amongst some employees already. However, car sharing can be further encouraged as a likely alternative to single occupancy vehicle travel.

## 8 FUTURE TRAFFIC FLOWS

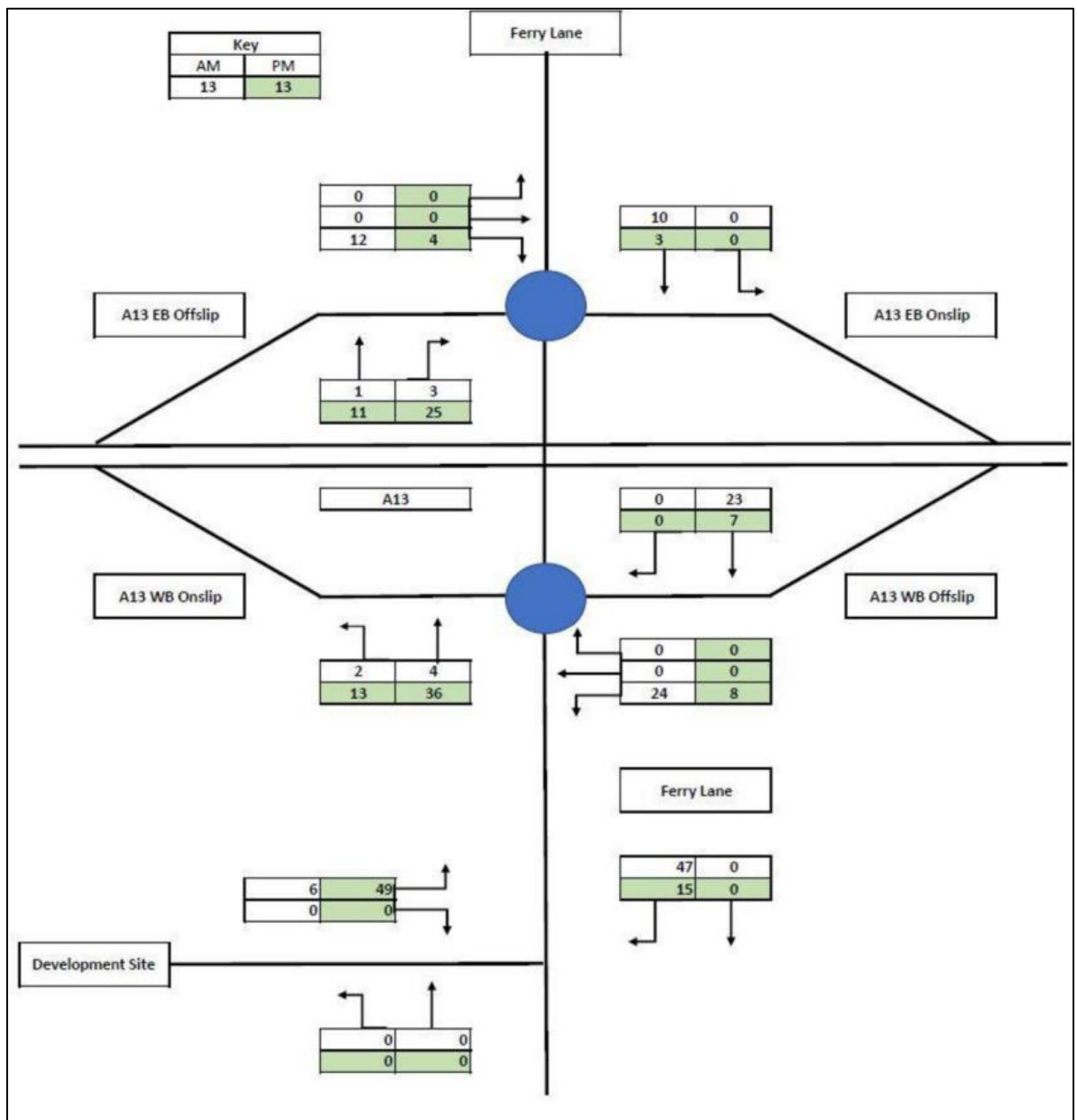
### 8.1 FORECAST GROWTH

- 8.1.1 To undertake a junction capacity assessment for a future year scenario, a forecast year of 2029 has been used (2024 Base Year plus five years). To calculate the 2029 forecast traffic flows for assessment, growth factors have been calculated and applied to the 2024 surveyed flows using the most recent DfT guidance 'Use of TEMPRO data: WebTAG Unit 3.15.2' published April 2009.
- 8.1.2 Traffic growth factor for 2024 to 2029 has been derived using the DfT TEMPro 8.1 computer software and the NTM AF15 dataset, for the 'Havering 028' (E02000491) Middle Super Output Area (MSOA). The future year of 2029 represents five years post submission of a planning application in line with TA guidelines.
- Morning peak hour 2024–2029 = 1.037254
  - Evening peak hour 2024–2029 = 1.037954
- 8.1.3 The growth factors have been applied to the base traffic flows to give 2029 background traffic flows.

### 8.2 COMMITTED DEVELOPMENTS

- 8.2.1 Committed schemes are defined as developments or transport schemes which have current planning consent, but which are unimplemented or incomplete, and could in the future have a significant impact on transport conditions or the layout of the local highway network.
- 8.2.2 It was agreed with LBH that the development at Plot 24 and 26 Ferry Lane should be included as a committed development. The planning portal on London Borough of Havering website has been reviewed and the following committed development has been considered in this TA:
- P1492.21 – Application for full planning permission for two new industrial units providing 6,700 sqm GEA of flexible use (E(g)(iii) / B2 / B8) with parking, landscaping and associated works at Plot 24 and 26, Ferry Lane.
- 8.2.3 The TA for the above development has been reviewed and the development traffic flows have been obtained. It was demonstrated in the transport reports that the committed development will not have any southbound traffic from the site access, and therefore, there will be no traffic movements from the development passing the existing GRS site access on Ferry Lane. Consequently, traffic movements from the committed development have not been included for the junction capacity assessment with the GRS site access on Ferry Lane.
- 8.2.4 Traffic flows associated with Plot 24 and 26 Land off Ferry Lane can be found in the traffic flow diagram shown in **Figure 8-1**.

Figure 8-1: Traffic Flow Diagram - Plot 24 and 26 Land off Ferry Lane



Source: Planning Application Reference: P1492.21\_Project: Plot 24 and 26 Land off Ferry Lane\_ Report: Transport Assessment, dated 7<sup>th</sup> July 2021

## 9 HIGHWAY IMPACT

### 9.1 INTRODUCTION

9.1.1 As agreed with LBH, the junction assessment should include the Ferry Lane/GRS site access junction only. To identify the current and future capacity levels associated with the site, a junction capacity assessment has been undertaken at the site access junction. This chapter presents the outcomes of the junction modelling undertaken. Detailed outputs from the modelling assessment undertaken are included as **Appendix H** of this report.

### 9.2 DATA COLLECTION

#### Traffic Data

9.2.1 As mentioned in **4.15**, a JTC was carried out by an independent transport survey company (Streetwise Services LTD) at the site access junction on Ferry Lane. The survey was conducted on Tuesday 19<sup>th</sup> March 2024, a term-time neutral weekday. The JTCs were carried out between 0700-1900 hrs.

9.2.2 The raw data was analysed and the AM and PM peak hours within the 12-hour surveyed period were determined to provide a robust assessment of the operational capacity of the junction.

9.2.3 The following hourly peaks were identified for the purposes of the modelling:

- 0715-0815 hrs (AM peak)
- 1600-1700 hrs (PM peak)

9.2.4 The results of these traffic surveys were translated into a flow diagram for the highway surrounding the site, found in **Appendix I**, which illustrates the total vehicle count, Passenger Car Unit (PCU) movements and HGV percentages of vehicles during the AM and PM peaks respectively. Vehicle movements that are expressed in terms of PCUs, with different types of vehicles having different PCU values based on their relative size, described as follows:

- Pedal cycle = 0.2
- Motorcycle = 0.4
- Passenger car = 1.0
- Light Goods Vehicle (LGV) = 1.0
- Medium Goods Vehicle (MGV) = 1.5
- Buses and coaches – 2.0
- Heavy Goods Vehicle (HGV) = 2.3

9.2.5 The PCU values above are based on TfL guidance 'Traffic Modelling Guidance Version 4.0' September 2021.



9.2.6 As part of the work, queue length survey data has been obtained in five minute intervals, in order to ensure that the Base models are fully validated against existing queuing.

### 9.3 ASSESSMENT SCENARIOS

---

9.3.1 The assessment scenarios for the capacity assessment are as follows:

- Scenario 1: 2024 Base Year
- Scenario 2: 2029 Forecast Year

9.3.2 The full outputs including flow diagrams can be seen in **Appendix I**.

### 9.4 MODELLING TERMINOLOGY

---

9.4.1 The junction assessments have been assessed using the Junctions 10 'industry standard' computer modelling software for the priority controlled junctions for the Base and Forecast year models.

9.4.2 Assessments have been undertaken for the AM (0715-0815 hrs) and PM (1600-1700 hrs) peak period using the 'ONE HOUR' method for inputting traffic flows.

9.4.3 Junction capacity assessment results are presented, for non-signalised junctions, in terms of 'Ratio of Demand Flow to Capacity' ('RFC'), expressed as a factor of 1.00.

9.4.4 For non-signalised junctions, an RFC of less than 0.85 indicates that the junction is operating within its theoretical capacity; an RFC of equal to or greater than 0.85 but less than 1.00 indicates that the junction is approaching its capacity (but remains within capacity); and an RFC of equal to or greater than 1.00 indicates that it has either reached or exceeded its capacity. Once beyond 1.00, delays / queues are shown in the model to increase disproportionately with further increases in demand flow.

### 9.5 JUNCTION CAPACITY ASSESSMENT

---

9.5.1 The assessments for the AM and PM peak period have been undertaken using Junctions 10, with the output results contained in **Appendix H**. The junction capacity assessment has been undertaken during the network peak periods. No allowance or discounts have been made for the alleged extant B8 land use and as such the junction assessments are a robust 'worst case' scenario.

*Ferry Lane / GRS Site Access – Scenario 1: 2024 Base Year*

9.5.2 **Table 9-1** summarises the results of the junction capacity assessment for the junction with the 2024 Base Year flows.

**Table 9-1: 2024 Base Year - Junction Capacity Assessment**

Arm	AM Peak (07:15 – 08:15)			PM Peak (16:00 – 17:00)		
	RFC	Queue (Vehicle)	Delay (s)	RFC	Queue (Vehicle)	Delay (s)
Ferry Lane (north)	0.06	0.1	8.28	0.03	0.0	8.61
Car Park Access	0.00	0.0	0.0	0.00	0.0	0.0
Ferry Lane (south)	0.00	0.0	12.22	0.00	0.0	0.0
GRS Site Access	0.04	0.0	11.81	0.07	0.1	6.83

9.5.3 **Table 9-1** demonstrates that the junction is currently operating well within capacity in both the AM and PM peak period at the 2024 Base Year. The junction has a maximum RFC of 0.07 on the GRS site access arm.

*Ferry Lane / GRS Site Access – Scenario 2: 2029 Future Year*

9.5.4 **Table 9-2** summarises the results of the junction capacity assessment for the junction with the 2029 Future Year flows.

**Table 9-2: 2029 Future Year - Junction Capacity Assessment**

Arm	AM Peak (07:15 – 08:15)			PM Peak (16:00 – 17:00)		
	RFC	Queue (Vehicle)	Delay (s)	RFC	Queue (Vehicle)	Delay (s)
Ferry Lane (north)	0.07	0.1	8.32	0.03	0.0	8.62
Car Park Access	0.00	0.0	0.0	0.00	0.0	0.0
Ferry Lane (south)	0.00	0.0	12.22	0.00	0.0	0.0
GRS Site Access	0.04	0.0	11.83	0.07	0.1	6.86

9.5.5 **Table 9-2** demonstrates that the junction operates well within capacity in both the AM and PM peak period, in the 2029 Future Year. The junction has a maximum RFC of 0.07 on the Ferry Lane (north) and GRS site access arms. The results show that the development traffic has negligible impact on the operation of the junction.

9.5.6 Further to the above, the site is already in full operation and there will be no uplift in traffic or throughput of materials. Therefore, no additional traffic movements are expected.

## 9.6 HIGHWAY IMPACT AT OFF-SITE JUNCTIONS

9.6.1 Although it was agreed with LBH to undertake a junction capacity assessment at the site access junction only, percentage impacts on the surrounding highway network have been calculated for information. This has been undertaken by comparing the 2024 Base year to the site traffic. **Table 9-3** shows the change in traffic flows at Ferry Lane / A13 dumbbell roundabouts and the percentage change when comparing 'with' and 'without' site traffic flows.

**Table 9-3: Traffic Impacts at the Ferry Lane / A13 Dumbbell Roundabouts**

Junction	AM Peak Hour			PM Peak Hour		
	2024 Without Site Flows	Site Flows (Vehicles)	% Change	2024 Without Site Flows	Site Flows (Vehicles)	% Change
Ferry Lane Southern Dumbbell Roundabout	1681	45	2.7%	942	59	6.3%
Ferry Lane Northern Dumbbell Roundabout	1308	25	1.9%	1427	28	2.0%

9.6.2 As shown in **Table 9-3**, the increase in traffic at the Ferry Lane / A13 dumbbell roundabout junctions is minimal. The increase at these junctions is negligible and typical day-to-day traffic flow variations can result in larger changes. The PM peak hour trips on the southern dumbbell roundabout comprise a higher proportion of overall traffic flows compared to the AM peak and when compared to both peaks at the northern dumbbell roundabout. However, this is due to the low base flow vehicle movements recorded and does not increase vehicle flows detrimentally. It is therefore concluded that the site use does not have a ‘severe’ impact upon the operation of off-site junctions within the TA study area.

## 9.7 TRAFFIC RELATED ENVIRONMENTAL IMPACTS

9.7.1 The Institute of Environmental Assessment (IEMA) Guidance Note “Environmental Assessment of Traffic and Movement” sets out when traffic related environmental impacts can be scoped out further. The guidance states to ‘include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%). The percentage highway impact on Ferry Lane is:

- 7.1% in the morning peak hour.
- 12.5% in the evening peak hour.

9.7.2 In this case, the increase in traffic flows is no more than 30% or more on any highway links within the vicinity of the site. The above scenario is assessed as a ‘worst case scenario’ and includes HGV trips as well as light vehicle trips associated with the site.

9.7.3 Whilst the site will increase the number of HGVs on Ferry Lane, this is not considered to be significant and will take place on a short section of road where there are not considered to be any sensitive environmental receptors within the immediate vicinity. There is therefore no need for further assessment.

9.7.4 Generally, the site will therefore fall below the threshold for requiring any further assessments of the environmental impacts of traffic and the development will have no demonstrable impact on severance, driver delay, pedestrian delay, amenity, fear and intimidation. In any event, there are no limited receptors in terms of schools, housing etc. which might be affected. On this basis it is concluded that the site use does not have a material impact in this regard.

## 10 SUMMARY

### 10.1 SUMMARY

- 10.1.1 Tetra Tech has been appointed by GRS Integrated Solutions to prepare a Transport Assessment following an appeal for the unlawful land use of an existing minerals and waste processing site at Frog Island, Ferry Lane, Rainham.
- 10.1.2 The site is currently operated by GRS (historically operated by S. Walsh & Son Limited). London Borough of Havering served an enforcement notice (ENF/559/20). The enforcement notice dated 18th July 2022 was for the alleged material change of use of the land from use for storage (B8) to a waste management facility importing processing and exporting waste materials.
- 10.1.3 GRS provided information about existing vehicle movements, staff numbers and shift times at the site. GRS confirmed that the site will not generate any new trips over and above its current operation levels.
- 10.1.4 Vehicular access into the site will be provided via the existing simple priority access junction onto Ferry Lane. The simple priority junction provides access only to users of the site and the access does not connect to any other units other than GRS.
- 10.1.5 The walking catchment demonstrates that Rainham railway station and numerous bus stops in its proximity are within a 2km walking catchment of the site. The walking catchment also covers a few residential properties and amenities. The 5km cycling catchment includes Rainham, South Hornchurch, Wennington, Rainham station and Dagenham Dock station. The 5km catchment also includes some of Dagenham and Purfleet-on-Thames.
- 10.1.6 The nearest bus stop is located at Rainham railway station, Celtic Farm Road at bus stop: Rainham Interchange (Stop N), approximately 1.6km northeast of the site access. There are four bus services that stop within the 2km walking catchment. The nearest train station is Rainham which is located approximately 1.6km northeast of the site. Trains operate throughout the day to destinations including Grays, London Fenchurch Street, Limehouse, West Ham, Barking, Pitsea and Leigh On Sea for peak commuter travel as well as shift work and other associated journeys (i.e. underground, and additional bus services).
- 10.1.7 It is established that there are no existing road safety problems that are likely to be exacerbated by continued use of the site, especially considering that the site is already operational with associated vehicular activity already on the local highway network. No collisions were recorded at or near the site access and no collisions recorded in the wider area involved HGVs.
- 10.1.8 An ATZ assessment has been undertaken to determine how people of all abilities can make key journeys that support car-free lifestyles. One key route has been identified between the site and several key destinations within the site's ATZ. The route connects the site with Tesco

supermarket, Rainham town centre, Rainham railway station, bus stops, NCN and Rainham Marshes. Overall, the journey provides good facilities and infrastructure for pedestrian and cyclist movement. The worst point was identified at the northern dumbbell pedestrian crossing. The crossings tactile paving is covered in dirt which limits the available surface to assist visually impaired people across the road; there is also an abundance of litter and debris near the crossing. It is recommended that regular general maintenance is provided to help with the perception of feeling relaxed.

10.1.9 Overall, the uplift in vehicle trips when compared to a B8 land-use is deemed negligible and is not considered to result in any adverse impacts on the transport network.

10.1.10 Several sustainable transport measures have been identified that could be implemented to reduce the number of employees who travel to and from the site via private, single occupant vehicles.

10.1.11 The junction in a 2029 Future Year has a maximum RFC of 0.07 on the Ferry Lane (north) and GRS site access arms. The results show that the current use has negligible impact on the operation of the junction. Also, as the site is already in full operation and there will be no uplift in traffic or increased material throughput over and above the existing, no additional traffic movements are expected.

10.1.12 Traffic impacts due to the existing site use at the Ferry Lane / A13 dumbbell roundabout junctions are minimal. The increase at this intersection is negligible and smaller than typical day-to-day traffic flow variations. It is therefore concluded that the current use of the site does not have a 'severe' impact on the operation of the highway network.

10.1.13 Traffic related environmental impacts has been scoped out further. Whilst the site will increase the number of HGVs on Ferry Lane, this is not considered to be significant and will take place on a short section of road where there are not considered to be any sensitive environmental receptors within the immediate vicinity. The site will therefore fall below the threshold for requiring any further assessments of the environmental impacts of traffic and the development will have no demonstrable impact on severance, driver delay, pedestrian delay, amenity, fear and intimidation. In any event, there are no limited receptors in terms of schools, housing etc. which might be affected. On this basis it is concluded that the site does not have a material impact in this regard.

10.1.14 Based on the findings of this report it is considered that the site does not have a severe impact on the highway network as set out in the NPPF and is in accordance with relevant policy and design guidance. Given the findings of this report it is considered that the existing use of the site is acceptable in transport terms. It is concluded that the proposals are acceptable in terms of road safety and highway capacity, and it is respectfully recommended that the existing use to process construction waste is formalised and permitted.

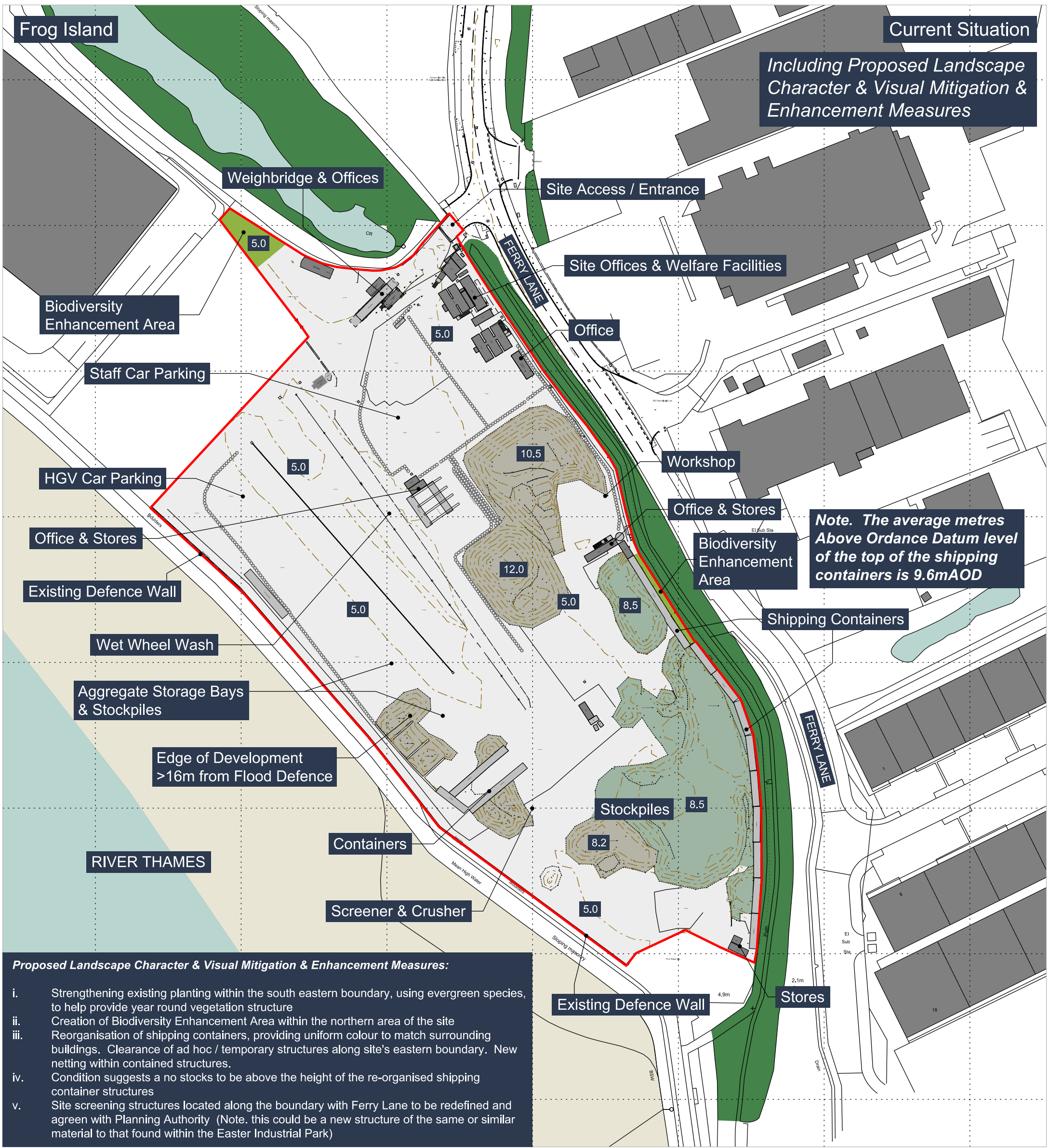


## APPENDICES

---

## APPENDIX A – CURRENT SITUATION







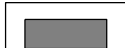


---



**Proposed Landscape Character & Visual Mitigation & Enhancement Measures:**

- i. Strengthening existing planting within the south eastern boundary, using evergreen species, to help provide year round vegetation structure
- ii. Creation of Biodiversity Enhancement Area within the northern area of the site
- iii. Reorganisation of shipping containers, providing uniform colour to match surrounding buildings. Clearance of ad hoc / temporary structures along site's eastern boundary. New netting within contained structures.
- iv. Condition suggests a no stocks to be above the height of the re-organised shipping container structures
- v. Site screening structures located along the boundary with Ferry Lane to be redefined and agree with Planning Authority (Note. this could be a new structure of the same or similar material to that found within the Easter Industrial Park)

**LEGEND**

	Application Boundary		Concrete Hardstanding
	Contours (1m Intervals) & Spot Heights m aOD		Biodiversity Enhancement Area
	Waterbodies & Watercourses		
	Woodland, Trees & Scrub		
	Buildings		
	Containers within the Site		
	Stockpiles		



PROJECT:  
**Frog Island**

TITLE: **Current Situation**  
*Including Proposed Landscape Character & Visual Mitigation & Enhancement Measures*

REF NO:  
**KD.FR.G.2.D.001**

DATE: **March 2024**      SCALE: **1:1,250 @ A3**

STATUS:  
**FINAL**

This drawing may not be used without the consent of Kedd Development Limited  
 Fox Studio, Much Wenlock, Shropshire TF13 6BL  
 © Crown copyright and database rights [2017] Ordnance Survey 0100031673



## APPENDIX B – SCOPING EMAIL

---

## Cranston, Issac

---

**From:** Godhania, Pravin  
**Sent:** 13 March 2024 17:01  
**To:** Inioluwa Owoyemi  
**Subject:** GRS Frog Island. Ferry Lane | Transport Statement Scoping Discussion  
**Attachments:** Frog\_Island\_Rainham\_Rainham\_RM13\_9YH\_\_Planning\_enforcement\_notice\_\_18\_July\_2022.pdf

Hi Ini,

Thank you for your time earlier today on MS Teams. I thought that I would send a note of our scoping discussion and actions. The site is currently operated by GRS (historically operated by S. Walsh & Son Limited). London Borough of Havering served an enforcement notice (ENF/559/20) as attached. The enforcement notice, dated 18th July 2022 was for the alleged material change of use of the Land from use for storage to a waste management facility importing processing and exporting waste materials took. The appellant considers that the use enforced against is consistent with (or at the very least can be the subject of conditions so that it is consistent with) the aims and objectives of national policy and guidance and the terms of the statutory development plan for the area and that planning permission should be granted.

In terms of highways, we will prepare a Highway Statement that will be prepared as a Transport Statement (TS) to investigate the highway impact of the site will be produced in accordance with the National Planning Policy Framework (NPPF) and Planning Practice Guidance 'Travel Plans, Transport Assessments and Statements'. The TS will demonstrate if the proposed development will result in an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

### Existing Site Information

- A site location plan that shows the proposed development site in relation to the surrounding area and transport system.
- The existing use of the site.
- Information on any traffic restrictions associated with the site.
- The existing land uses in the vicinity of the site.
- Existing site access arrangements including access constraints where appropriate.
- Surrounding highway conditions, including an assessment of the highway network.
- Review of the existing sustainable transport opportunities including walking, cycling and public transport.

### Baseline Transport Data

- A description and functional classification of the highway network in the vicinity of the site.
- An analysis of the personal injury accident records on the public highway in the vicinity of the site access for the most recent 5-year period. We agreed to use data from CrashMap.
- An Automatic Traffic Counter will be installed on Ferry Lane (close to the GRS access) for 7 days commencing Sunday 17th March 2024 (to miss the Easter Holidays).
- A 12-hour classified turning count at the site access on Tuesday 19th March 2024.
- We agreed that data collection/an assessment of the A13 double compact roundabout arrangement is not necessary.
- An assessment of total development trip generation will be undertaken for the weekday AM and PM peak hours.

### GRS Site

- Full description of the development (including plans/drawings). Details will include servicing arrangements.
- The TS will propose a site access strategy for pedestrians, cyclists and if appropriate public transport;
- The geometry of the GRS site access including junction radii, widths, visibility splays and AutoTrack swept paths.
- The existing/potential vehicular trip generation.
- An assessment of the impact on Ferry Lane.
- Investigate opportunities to encourage sustainable travel.
- Review of employee, visitor and HGV cycle/vehicle parking spaces.

### Development Impact

- Undertake a junction capacity assessment at the site access junction.



- It is understood that a development was recently granted to the north of the Ferry Lane/Coldharbour Lane roundabout that we should include as a committed development. It is understood that you will provide the planning reference so that we can download the necessary information from the supporting Transport Report via the planning database. No further committed developments have been identified. Please note that we would require trip generation/distribution details of the committed developments.
- Notwithstanding, we will growth the background traffic flows using TEMPRO v8.1 Dataset 80 factors to growth the background traffic to five years post-date of the appeal i.e., 2029.

We will prepare the report on the basis as set out in this email. However, please let me know if you think we should consider any other point. Please let me know if you have any questions or queries – I look forward to hearing from you soon.

Kind Regards

**Pravin Godhania** | Associate Director

Direct +44 116 234 8134

**Tetra Tech** | *Leading with Science*®

4<sup>th</sup> Floor, Medius House, 1 Great Central Square, Leicester, LE1 4JS | [tetratecheurope.com](http://tetratecheurope.com)



Tetra Tech Limited. Registered in England number: 01959704

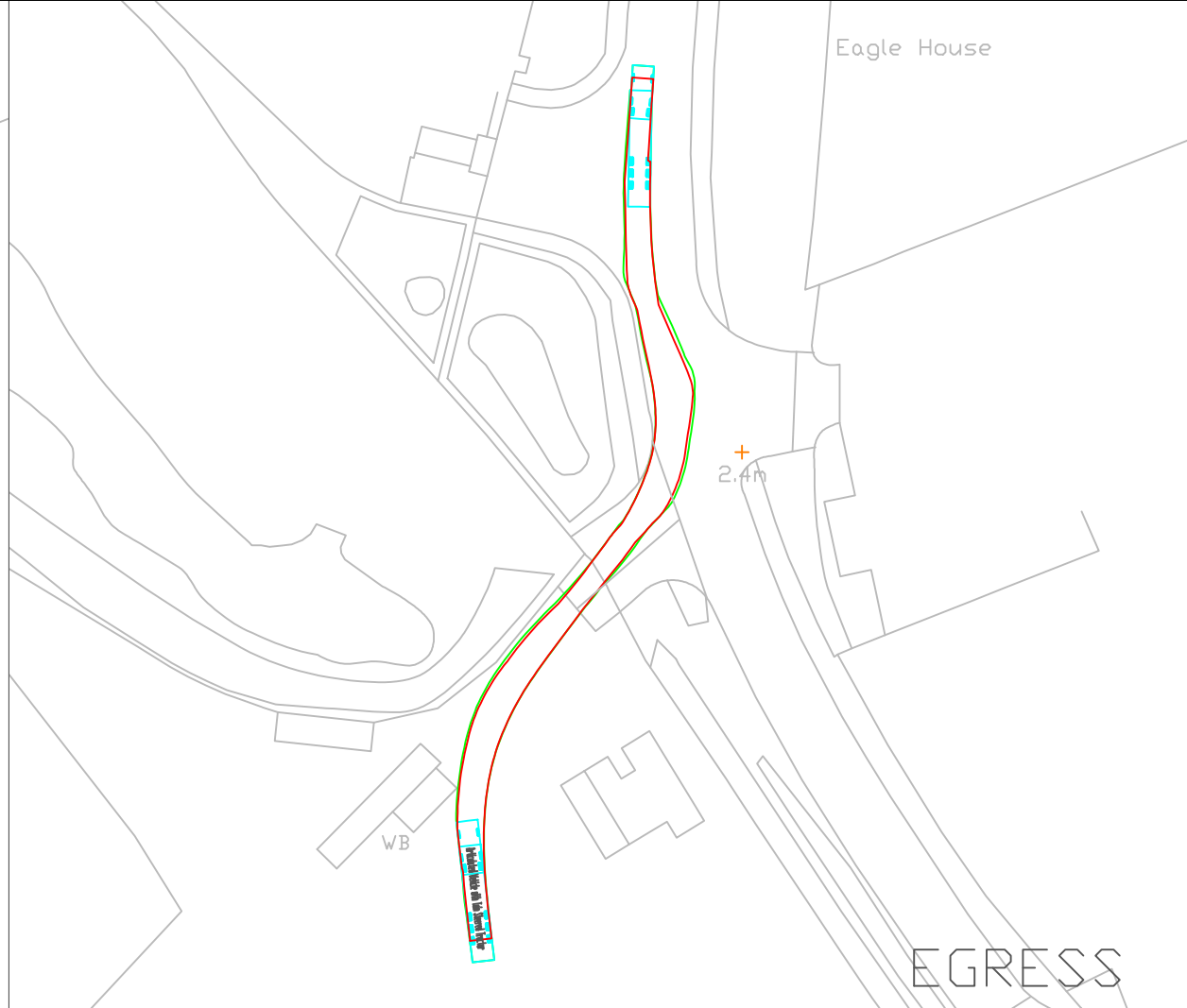
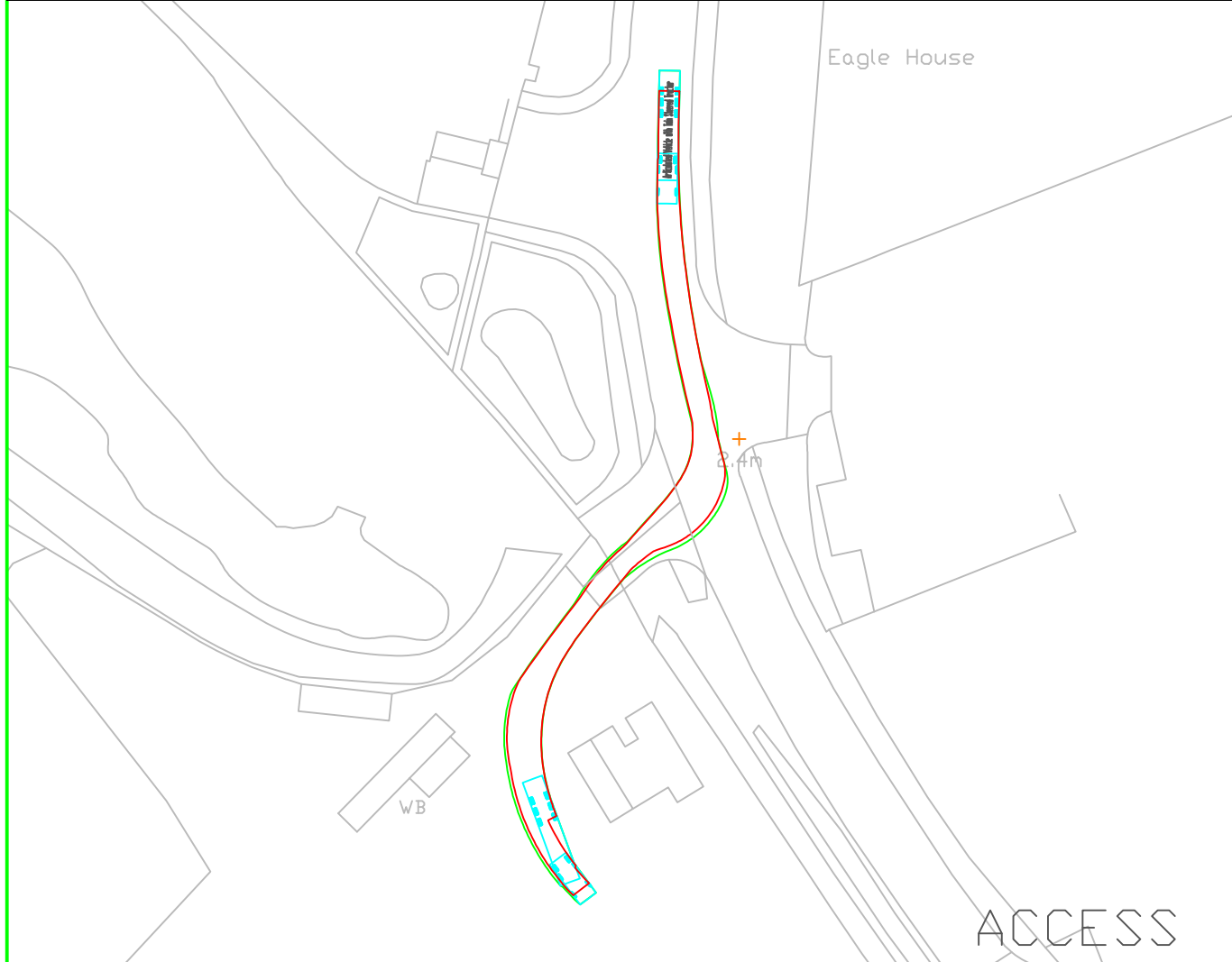
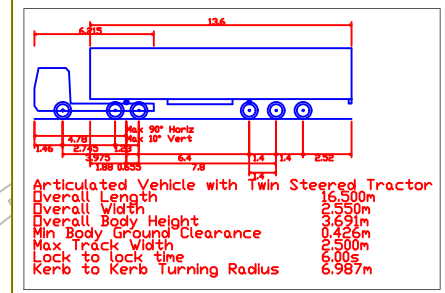
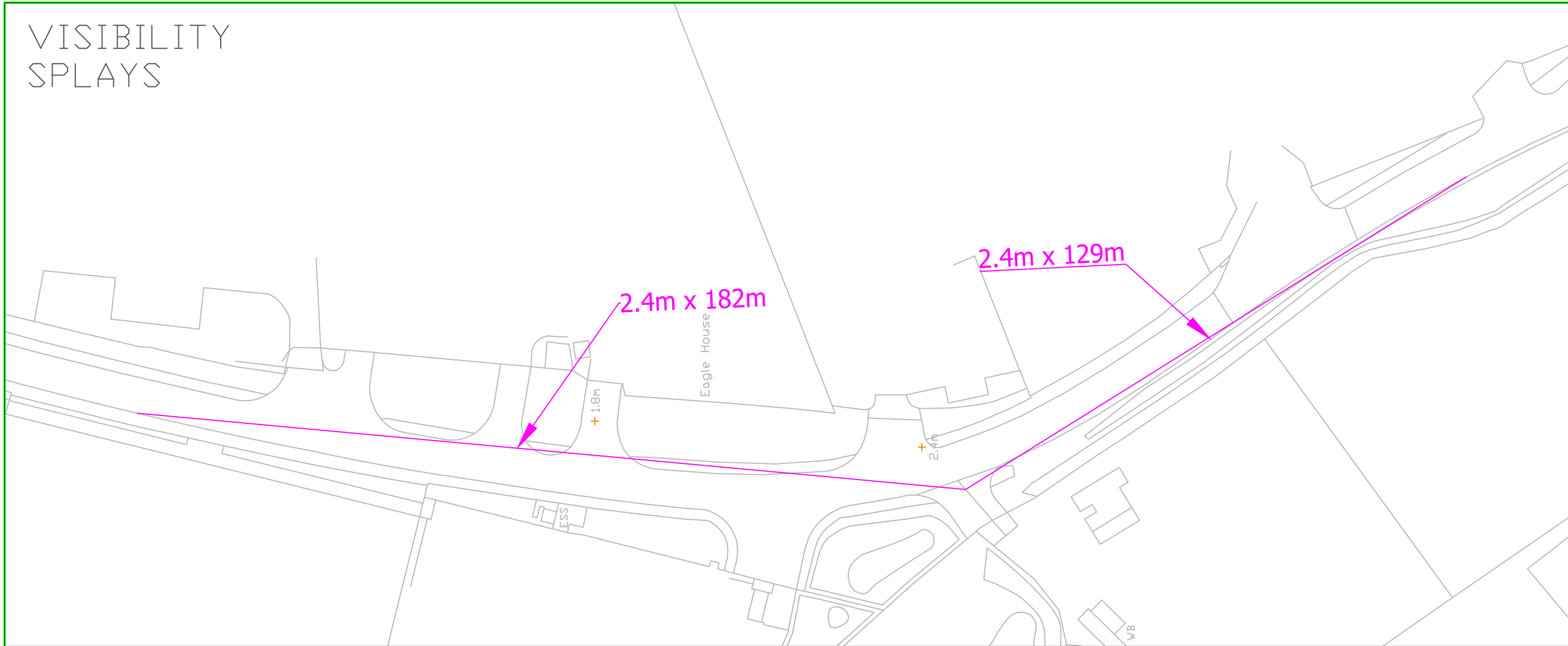
Registered Office: 3 Sovereign Square, Sovereign Street, Leeds LS1 4ER. VAT No: 431-0326-08



## APPENDIX C – SWEEP PATH ANALYSIS AND VISIBILITY

---

# VISIBILITY SPLAYS



Rev	Description	Date	Dim / Chk / App
Document Control			

Issuing Office  
**Tetra Tech Leicester**  
 4th Floor, No1 Great Central Square,  
 Vaughan Way, Leicester, LE1 4JS

Client  
**GRS INTEGRATED SOLUTIONS**

Project Name  
**LAND AT FROG ISLAND, FERRY LANE, RAINHAM**

Sheet Title  
**16.5M ARTICULATED VEHICLE TRACKING - ACCESS AND EGRESS - SITE ACCESS & VISIBILITY SPLAYS**

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Subsidiary
B065006	IJC	MARCH '24	PG	MARCH '24	PG	MARCH '24	NTS	SO

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
784	- TTE	- 00	- ZZ	- DR	- S	- 001	P01

© Copyright Tetra Tech TTE\_M7\_v1

## APPENDIX D – RAW TRAFFIC SURVEY DATA

---

Rainham - ATC 1 - Ferry Lane

Produced by Streetwise Services Ltd.



Channel - Northbound

Table with columns: Tuesday 19/03/2024, Hour, Min, Vehicle Classes (1-13), TOTAL. Data rows for hours 0-23.

Hour Ranges summary table with columns: Hour Ranges, 7-19, 467, 126, 5, 0, 4, 0, 0, 1, 15, 0, 6, 22, 0, 646, 6-22, 519, 133, 6, 0, 4, 0, 0, 1, 16, 0, 8, 23, 0, 710, 6-24, 522, 135, 6, 0, 4, 0, 0, 1, 16, 0, 8, 23, 0, 715, 0-24, 577, 139, 6, 0, 4, 0, 0, 1, 17, 0, 10, 23, 0, 777.

Channel - Southbound

Table with columns: Tuesday 19/03/2024, Hour, Min, Vehicle Classes (1-13), TOTAL. Data rows for hours 0-23.

Hour Ranges summary table with columns: Hour Ranges, 7-19, 497, 127, 3, 0, 2, 0, 0, 0, 14, 0, 5, 21, 0, 669, 6-22, 523, 131, 4, 1, 2, 0, 0, 0, 15, 0, 6, 21, 0, 703, 6-24, 538, 132, 4, 1, 2, 0, 0, 0, 15, 0, 6, 21, 0, 719, 0-24, 548, 133, 6, 1, 2, 0, 0, 0, 16, 0, 8, 22, 0, 736.

Rainham - ATC 1 - Ferry Lane

Produced by Streetwise Services Ltd.



Channel - Northbound

Table with columns: Tuesday 19/03/2024, Hour, Min, Vehicle Speeds (MPH) (0-10, 11-15, 16-20, 21-25, 26-30, 31-35, 36-40, 41-45, 46-50, 51-60, 61-70, 71-100), TOTAL. Data rows for hours 0-23.

Hour Ranges summary table with columns: Hour Ranges, 7-19, 4, 18, 44, 95, 217, 174, 68, 18, 5, 1, 0, 2, 646, 6-22, 4, 20, 48, 104, 240, 189, 76, 21, 5, 1, 0, 2, 710, 6-24, 4, 21, 48, 105, 242, 190, 76, 21, 5, 1, 0, 2, 715, 0-24, 4, 21, 50, 122, 264, 201, 84, 23, 5, 1, 0, 2, 777.

Channel - Southbound

Table with columns: Tuesday 19/03/2024, Hour, Min, Vehicle Speeds (MPH) (0-10, 11-15, 16-20, 21-25, 26-30, 31-35, 36-40, 41-45, 46-50, 51-60, 61-70, 71-100), TOTAL. Data rows for hours 0-23.

Hour Ranges summary table with columns: Hour Ranges, 7-19, 3, 28, 66, 158, 217, 135, 44, 14, 2, 1, 0, 1, 669, 6-22, 3, 30, 72, 169, 226, 140, 44, 15, 2, 1, 0, 1, 703, 6-24, 3, 30, 73, 176, 232, 142, 44, 15, 2, 1, 0, 1, 719, 0-24, 3, 32, 74, 181, 240, 142, 44, 16, 2, 1, 0, 1, 736.



Channel - Northbound

Wednesday 20/03/2024		Vehicle Classes													TOTAL
Hour	Min	1	2	3	4	5	6	7	8	9	10	11	12	13	
0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
2	0	7	1	0	0	0	0	0	0	0	0	0	0	0	8
3	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
4	0	7	0	0	0	0	0	0	0	1	0	0	0	0	8
5	0	35	3	0	0	1	0	0	0	0	0	0	1	0	40
6	0	46	2	0	0	0	0	0	0	1	0	1	0	0	50
7	0	126	14	0	0	0	0	0	0	2	0	1	0	0	143
8	0	116	6	0	0	0	0	0	0	1	0	1	5	0	129
9	0	42	12	0	0	0	0	0	0	1	0	2	2	0	59
10	0	18	15	1	0	1	0	0	0	3	0	1	0	0	39
11	0	19	14	2	0	1	0	0	0	2	0	1	1	0	40
12	0	16	10	1	0	0	0	0	0	0	0	3	2	0	32
13	0	39	13	1	0	2	0	0	0	1	0	1	0	0	57
14	0	22	8	0	0	1	0	0	0	1	0	0	3	0	35
15	0	15	10	0	0	0	0	0	0	0	0	0	2	0	27
16	0	19	9	0	0	0	0	0	0	1	0	2	0	0	31
17	0	12	2	0	0	0	0	0	0	2	0	0	0	0	16
18	0	6	4	0	0	0	0	0	0	0	0	0	1	0	11
19	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
20	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
21	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
22	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5

Hour	7-19	450	117	5	0	5	0	0	0	14	0	12	16	0	619
Ranges:	6-22	514	122	5	0	5	0	0	0	15	0	13	16	0	690
	6-24	520	123	5	0	5	0	0	0	15	0	13	16	0	697
	0-24	575	130	5	0	6	0	0	0	16	0	14	17	0	763

Channel - Northbound

Wednesday 20/03/2024		Vehicle Speeds (MPH)												TOTAL
Hour	Min	0-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-60	61-70	71-100	
0	0	0	0	1	2	0	1	0	0	0	0	0	0	4
1	0	0	0	0	1	0	1	0	0	0	0	0	0	2
2	0	0	0	0	1	1	5	1	0	0	0	0	0	8
3	0	0	0	0	0	0	2	0	2	0	0	0	0	4
4	0	0	0	0	2	3	3	0	0	0	0	0	0	8
5	0	0	1	2	4	10	15	5	3	0	0	0	0	40
6	0	1	1	0	5	23	12	6	2	0	0	0	0	50
7	0	0	0	5	18	63	42	10	4	1	0	0	0	143
8	0	0	0	5	12	51	40	13	7	1	0	0	0	129
9	0	1	1	7	7	21	7	12	3	0	0	0	0	59
10	0	0	1	3	8	16	9	2	0	0	0	0	0	39
11	0	0	0	1	11	14	8	5	0	1	0	0	0	40
12	0	0	3	5	7	11	5	0	1	0	0	0	0	32
13	0	0	1	3	15	16	17	1	4	0	0	0	0	57
14	0	0	0	2	4	8	12	7	0	1	1	0	0	35
15	0	1	0	1	4	10	6	4	0	1	0	0	0	27
16	0	0	0	1	4	15	7	3	1	0	0	0	0	31
17	0	0	1	3	0	4	5	3	0	0	0	0	0	16
18	0	0	0	0	2	2	1	1	3	1	1	0	0	11
19	0	0	0	0	0	1	3	0	1	1	0	0	0	6
20	0	0	1	0	0	3	0	0	2	0	0	0	0	6
21	0	0	0	0	2	4	2	1	0	0	0	0	0	9
22	0	0	0	1	0	0	1	0	0	0	0	0	0	2
23	0	0	0	0	0	3	1	1	0	0	0	0	0	5

Hour	7-19	2	7	36	92	231	159	61	23	6	2	0	0	619
Ranges:	6-22	3	9	36	99	262	176	68	28	7	2	0	0	690
	6-24	3	9	37	99	265	178	69	28	7	2	0	0	697
	0-24	3	10	40	109	279	205	75	33	7	2	0	0	763

Channel - Southbound

Wednesday 20/03/2024		Vehicle Classes													TOTAL
Hour	Min	1	2	3	4	5	6	7	8	9	10	11	12	13	
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3	0	2	1	1	0	0	0	0	0	0	0	3	0	0	7
4	0	1	1	0	0	0	0	0	0	2	0	0	0	0	4
5	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
6	0	18	2	0	0	0	0	0	0	1	0	1	1	0	23
7	0	19	12	0	0	2	0	0	0	1	0	0	0	0	34
8	0	15	7	0	0	1	0	0	0	3	0	1	2	0	29
9	0	15	10	2	0	0	0	0	0	1	0	1	1	0	30
10	0	14	16	0	0	0	0	0	0	1	0	1	1	0	33
11	0	18	8	1	0	1	0	0	0	1	0	0	0	0	29
12	0	23	7	0	0	1	0	0	0	3	0	0	2	0	36
13	0	28	8	1	0	2	0	0	0	1	0	2	1	0	43
14	0	63	9	0	0	0	0	0	0	0	0	0	1	0	73
15	0	48	9	0	0	0	0	0	0	0	0	1	0	0	58
16	0	116	9	0	0	0	0	0	0	1	0	1	1	0	128
17	0	109	8	0	0	0	0	0	0	0	0	1	0	0	118
18	0	22	3	0	0	0	0	0	0	0	0	0	2	0	27
19	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
20	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
21	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
22	0	14	0	0	0	0	0	0	0	0	0	0	0	0	14
23	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2

Hour	7-19	490	106	4	0	7	0	0	0	12	0	7	12	0	638
Ranges:	6-22	520	112	4	0	7	0	0	0	13	0	8	13	0	677
	6-24	536	112	4	0	7	0	0	0	13	0	8	13	0	693
	0-24	550	116	5	0	7	0	0	0	15	0	11	13	0	717

Channel - Southbound

Wednesday 20/03/2024		Vehicle Speeds (MPH)												TOTAL
Hour	Min	0-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-60	61-70	71-100	
0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1	0	0	0	0	1	1	2	1	0	0	0	0	0	5
2	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3	0	0	0	0	0	2	3	2	0	0	0	0	0	7
4	0	0	0	0	1	0	2	1	0	0	0	0	0	4
5	0	0	0	0	0	1	5	0	0	0	0	0	0	6
6	0	1	1	4	7	6	3	1	0	0	0	0	0	23
7	0	0	2	2	12	10	7	1	0	0	0	0	0	34
8	0	0	3	4	6	10	5	1	0	0	0	0	0	29
9	0	0	2	2	12	12	1	1	0	0	0	0	0	30
10	0	0	0	6	9	14	4	0	0	0	0	0	0	33
11	0	0	1	3	12	6	7	0	0	0	0	0	0	29
12	0	0	1	5	16	7	5	2	0	0	0	0	0	36
13	0	0	0	5	16	14	2	5	0	1	0	0	0	43
14	0	1	1	4	12	25	22	5	3	0	0	0	0	73
15	0	2	2	1	16	18	12	6	1	0	0	0	0	58
16	0	0	1	4	24	50	35	12	2	0	0	0	0	128
17	0	0	2	6	23	41	34	9	3	0	0	0	0	118
18	0	0	0	1	6	9	5	3	2	1	0	0	0	27
19	0	0	0	1	0	6	0	0	1	1	0	0	0	9
20	0	0	0	0	1	1	1	0	0	0	0	0	0	3
21	0	0	0	0	1	1	1	0	1	0	0	0	0	4
22	0	0	0	2	4	7	1	0	0	0	0	0	0	14
23	0	0	0	1	0	0	1	0	0	0	0	0	0	2

Hour	7-19	3	15	43	164	216	139	45	11	2	0	0	0</
------	------	---	----	----	-----	-----	-----	----	----	---	---	---	-----





14	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
15	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
16	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
20	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
21	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Hour	7-19	62	14	0	0	0	0	0	0	0	0	0	0	1	0	77
Ranges:	6-22	77	16	0	0	0	0	1	0	0	0	1	0	1	0	95
	6-24	79	16	0	0	0	0	1	0	0	0	1	0	0	0	97
	0-24	97	18	0	0	0	0	1	0	0	1	0	0	1	0	117

14	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	6
15	0	0	1	0	1	2	1	1	0	0	0	0	0	0	0	6
16	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
17	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
18	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
19	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3
20	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3
21	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
22	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1

Hour	7-19	0	4	4	12	18	16	14	4	5	0	0	0	0	0	77
Ranges:	6-22	0	4	5	17	26	18	15	5	5	0	0	0	0	0	95
	6-24	0	4	5	19	26	18	15	5	5	0	0	0	0	0	97
	0-24	0	5	5	20	33	25	18	6	5	0	0	0	0	0	117

Channel - Southbound

Saturday 23/03/2024		Vehicle Classes													TOTAL	
Hour	Min	1	2	3	4	5	6	7	8	9	10	11	12	13		
0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	6
9	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
10	0	4	1	0	0	0	0	0	1	0	0	0	0	0	0	5
11	0	6	0	0	0	0	0	0	0	1	0	0	0	0	0	7
12	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
13	0	13	1	0	0	0	0	0	0	1	0	0	0	0	0	15
14	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
15	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
16	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
17	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
18	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
21	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Hour	7-19	78	7	0	0	0	0	0	0	1	0	1	0	0	0	87
Ranges:	6-22	94	10	0	0	0	0	1	0	1	0	1	0	0	0	106
	6-24	96	10	0	0	0	0	1	0	1	0	1	0	0	0	108
	0-24	102	11	0	0	0	0	1	0	1	0	1	0	0	0	115

Channel - Northbound

Sunday 24/03/2024		Vehicle Classes													TOTAL	
Hour	Min	1	2	3	4	5	6	7	8	9	10	11	12	13		
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	8
9	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11	0	3	2	0	0	0	0	0	0	0	0	1	0	0	0	6
12	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
13	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
14	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	6
15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
16	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
17	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
18	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Channel - Southbound

Saturday 23/03/2024		Vehicle Speeds (MPH)											TOTAL			
Hour	Min	0-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-60	61-70		71-100		
0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	2	5	4	2	0	0	0	0	0	0	0	0	13
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	2	3	1	0	0	0	0	0	0	0	0	6
9	0	0	0	1	3	2	3	0	0	0	0	0	0	0	0	9
10	0	0	1	1	0	0	2	1	0	0	0	0	0	0	0	5
11	0	0	1	0	3	3	0	0	0	0	0	0	0	0	0	7
12	0	0	0	0	4	3	2	1	0	0	0	0	0	0	0	10
13	0	0	1	0	3	5	2	1	2	1	0	0	0	0	0	15
14	0	0	1	0	7	4	0	0	1	1	0	0	0	0	0	14
15	0	0	1	0	5	4	1	0	0	0	0	0	0	0	0	11
16	0	0	0	1	1	1	2	0	0	0	0	0	0	0	0	5
17	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3
18	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4
21	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2

Hour	7-19	0	6	4	30	25	14	3	3	2	0	0	0	0	0	87
Ranges:	6-22	0	6	6	37	31	18	3	3	2	0	0	0	0	0	106
	6-24	0	6	6	39	31	18	3	3	2	0	0	0	0	0	108
	0-24	0	6	6	40	37	18	3	3	2	0	0	0	0	0	115

Channel - Northbound







### Rainham - ATC 1 - Ferry Lane

Produced by Streetwise Services Ltd.



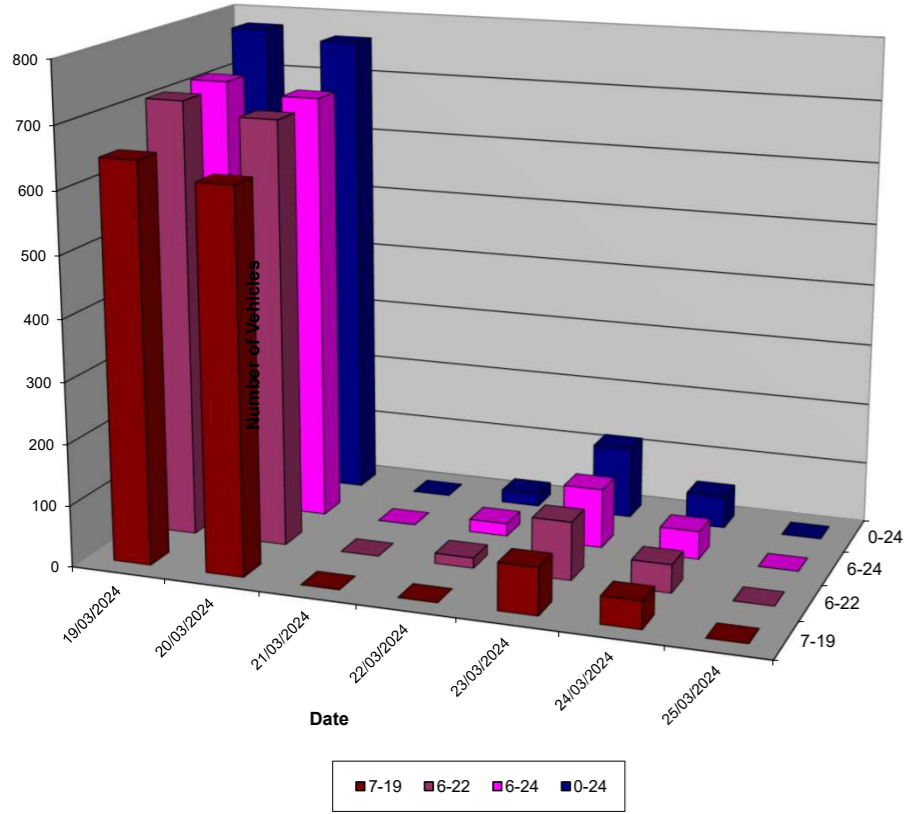
Channel - Northbound

#### Vehicle Flow

Hour	Min	19/03/2024	20/03/2024	21/03/2024	22/03/2024	23/03/2024	24/03/2024	25/03/2024	5 Day Ave	7 Day Ave
		Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday		
0	0	1	4	0	0	2	1	0	3	2
1	0	1	2	0	0	2	0	0	2	2
2	0	5	8	0	0	0	1	0	7	5
3	0	1	4	0	0	2	0	0	3	2
4	0	6	8	0	0	4	1	0	7	5
5	0	48	40	0	0	10	4	0	44	26
6	0	47	50	0	0	10	0	0	49	36
7	0	146	143	0	0	12	2	0	145	76
8	0	132	129	0	0	11	8	0	131	70
9	0	61	59	0	0	8	2	0	60	33
10	0	60	39	0	0	6	3	0	50	27
11	0	34	40	0	0	6	6	0	37	22
12	0	40	32	0	0	9	4	0	36	21
13	0	53	57	0	0	9	4	0	55	31
14	0	39	35	0	0	6	6	0	37	22
15	0	38	27	0	0	6	2	0	33	18
16	0	24	31	0	0	2	4	0	28	15
17	0	15	16	0	0	1	3	0	16	9
18	0	4	11	0	0	1	1	0	8	4
19	0	6	6	0	1	3	1	0	4	3
20	0	2	6	0	3	3	0	0	4	4
21	0	9	9	0	13	2	0	0	10	8
22	0	3	2	0	2	1	0	0	2	2
23	0	2	5	0	2	1	0	0	3	3

Hour Ranges:	7-19	6-22	6-24	0-24	646	619	0	0	77	45	0	633	347
	6-22	710	690	0	17	95	46	0	472	312			
	6-24	715	697	0	21	97	46	0	478	315			
	0-24	777	763	0	21	117	53	0	520	346			

#### Vehicle Flow (Channel 1)



### Rainham - ATC 1 - Ferry Lane

Produced by Streetwise Services Ltd.



Channel - Northbound

#### Average Speed

Hour	Min	19/03/2024	20/03/2024	21/03/2024	22/03/2024	23/03/2024	24/03/2024	25/03/2024		
		Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday		
0	0	19.4	25.1	-	-	25.1	32.0	-		
1	0	25.5	27.7	-	-	33.3	-	-		
2	0	31.8	32.3	-	-	-	40.2	-		
3	0	26.7	38.2	-	-	36.6	-	-		
4	0	36.3	29.4	-	-	26.4	20.7	-		
5	0	28.6	31.0	-	-	31.7	27.9	-		
6	0	31.0	29.8	-	-	25.5	-	-		
7	0	30.0	29.8	-	-	33.0	33.5	-		
8	0	29.2	30.7	-	-	32.9	32.8	-		
9	0	30.7	28.9	-	-	30.4	29.0	-		
10	0	29.5	27.2	-	-	31.0	29.0	-		
11	0	29.5	29.3	-	-	23.6	29.3	-		
12	0	29.1	25.3	-	-	34.6	35.1	-		
13	0	26.4	28.7	-	-	33.8	29.2	-		
14	0	27.0	32.2	-	-	25.4	31.2	-		
15	0	28.3	29.4	-	-	27.2	34.5	-		
16	0	31.4	29.7	-	-	25.7	23.4	-		
17	0	28.5	28.6	-	-	24.7	34.8	-		
18	0	32.0	36.8	-	-	36.2	36.6	-		
19	0	25.9	36.8	-	69.9	29.5	20.7	-		
20	0	20.1	30.3	-	22.3	29.6	-	-		
21	0	28.0	28.4	-	30.1	35.7	-	-		
22	0	27.7	25.7	-	27.1	24.8	-	-		
23	0	23.3	31.0	-	27.8	24.8	-	-		

Hour Ranges:	10-12	14-16	0-24	29.5	28.3	-	-	27.3	29.2	-
	0-24	27.7	29.3	29.8	-	-	30.4	30.2	30.8	-

7 Day Ave 29.6

Channel - Northbound

#### 85th Percentile

Hour	Min	19/03/2024	20/03/2024	21/03/2024	22/03/2024	23/03/2024	24/03/2024	25/03/2024		
		Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday		
0	0	19.4	28.3	-	-	25.9	32.0	-		
1	0	25.5	31.6	-	-	37.7	-	-		
2	0	36.0	35.3	-	-	-	40.2	-		
3	0	26.7	43.4	-	-	41.8	-	-		
4	0	42.6	34.2	-	-	31.8	20.7	-		
5	0	34.3	38.3	-	-	35.2	34.4	-		
6	0	37.6	35.6	-	-	29.2	-	-		
7	0	35.7	34.5	-	-	41.4	35.8	-		
8	0	34.8	36.6	-	-	37.4	34.8	-		
9	0	36.4	37.3	-	-	33.8	32.4	-		
10	0	35.0	32.5	-	-	36.8	33.7	-		
11	0	35.6	34.8	-	-	30.2	35.9	-		
12	0	35.2	30.6	-	-	45.4	36.1	-		
13	0	31.2	34.6	-	-	43.2	36.5	-		
14	0	34.0	38.6	-	-	37.9	41.4	-		
15	0	34.8	36.1	-	-	34.0	35.8	-		
16	0	38.6	35.0	-	-	28.6	24.6	-		
17	0	36.2	37.1	-	-	24.7	43.2	-		
18	0	35.5	45.6	-	-	36.2	36.6	-		
19	0	32.2	45.5	-	69.9	31.4	20.7	-		
20	0	25.9	41.8	-	30.6	31.3	-	-		
21	0	34.1	33.2	-	34.1	40.0	-	-		
22	0	29.7	31.6	-	31.3	24.8	-	-		
23	0	30.6	34.4	-	28.7	24.8	-	-		

Hour Ranges:	10-12	14-16	0-24	35.5	33.7	-	-	32.5	36.0	-
	0-24	34.5	35.3	35.6	-	-	33.7	35.9	37.2	-

7 Day Ave 35.7

Channel - Southbound

#### Average Speed

Hour	Min	19/03/2024	20/03/2024	21/03/2024	22/03/2024	23/03/2024	24/03/2024	25/03/2024		
		Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday		
0	0	26.7	31.3	-	-	25.3	-	-		
1	0	13.4	26.3	-	-	28.9	23.8	-		
2	0	27.5	28.7	-	-	-	-	-		
3	0	-	28.6	-	-	-	33.5	-		
4	0	27.6	25.2	-	-	27.9	-	-		
5	0	23.5	27.5	-	-	-	-	-		
6	0	24.6	24.0	-	-	25.4	-	-		
7	0	25.6	26.2	-	-	-	34.1	-		
8	0	23.8	25.4	-	-	26.5	-	-		
9	0	24.3	24.8	-	-	26.7	24.3	-		
10	0	25.3	25.5	-	-	26.9	26.5	-		
11	0	25.3	25.1	-	-	22.4	26.1	-		
12	0	24.8	25.2	-	-	28.2	26.4	-		
13	0	25.3	26.8	-	-	30.7	24.4	-		
14	0	26.5	29.1	-	-	26.8	30.3	-		
15	0	27.1	27.4	-	-	24.8	29.2	-		
16	0	29.9	29.1	-	-	25.5	19.7	-		
17	0	29.3	28.7	-	-	21.9	22.0	-		
18	0	30.0	30.3	-	-	23.0	27.7	-		
19	0	26.7	30.0	-	32.0	-	24.3	-		

### Rainham - ATC 1 - Ferry Lane

Produced by Streetwise Services Ltd.

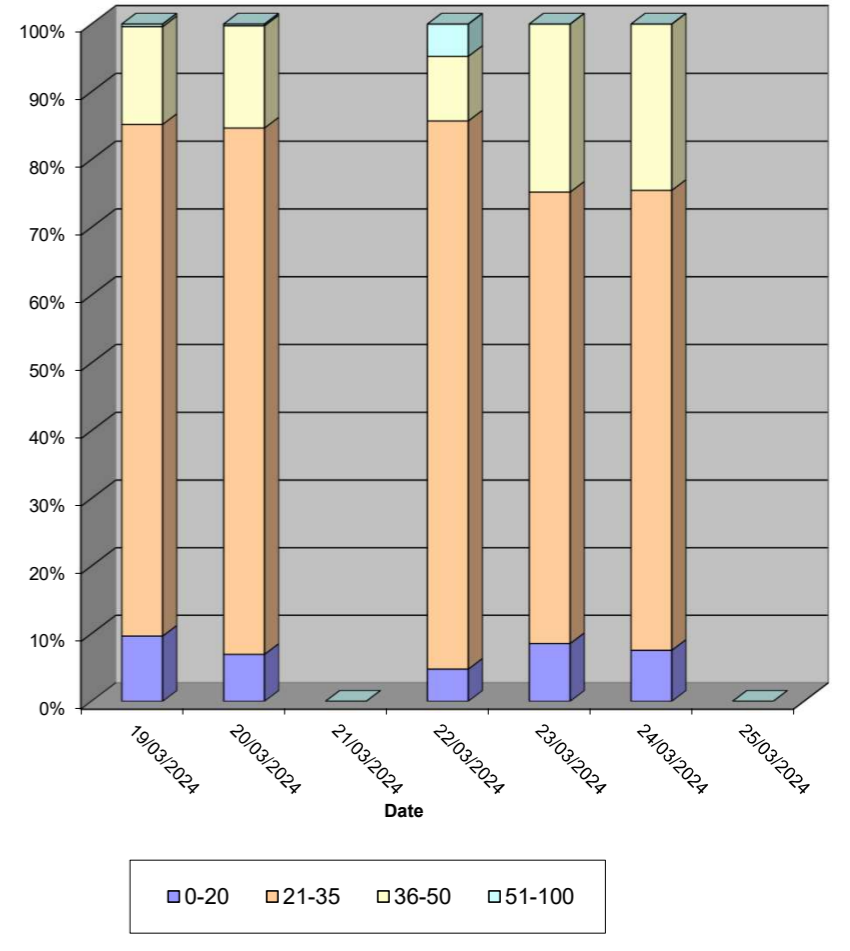


Channel - Northbound

#### Speed Summary

Speed (MPH)	19/03/2024	20/03/2024	21/03/2024	22/03/2024	23/03/2024	24/03/2024	25/03/2024		
	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday		
0-20	75	53	0	1	10	4	0		
21-35	587	593	0	17	78	36	0		
36-50	112	115	0	2	29	13	0		
51-100	3	2	0	1	0	0	0		
<b>TOTAL</b>	<b>777</b>	<b>763</b>	<b>0</b>	<b>21</b>	<b>117</b>	<b>53</b>	<b>0</b>		

#### Speed Summary (MPH)



Channel - Southbound

#### Speed Summary

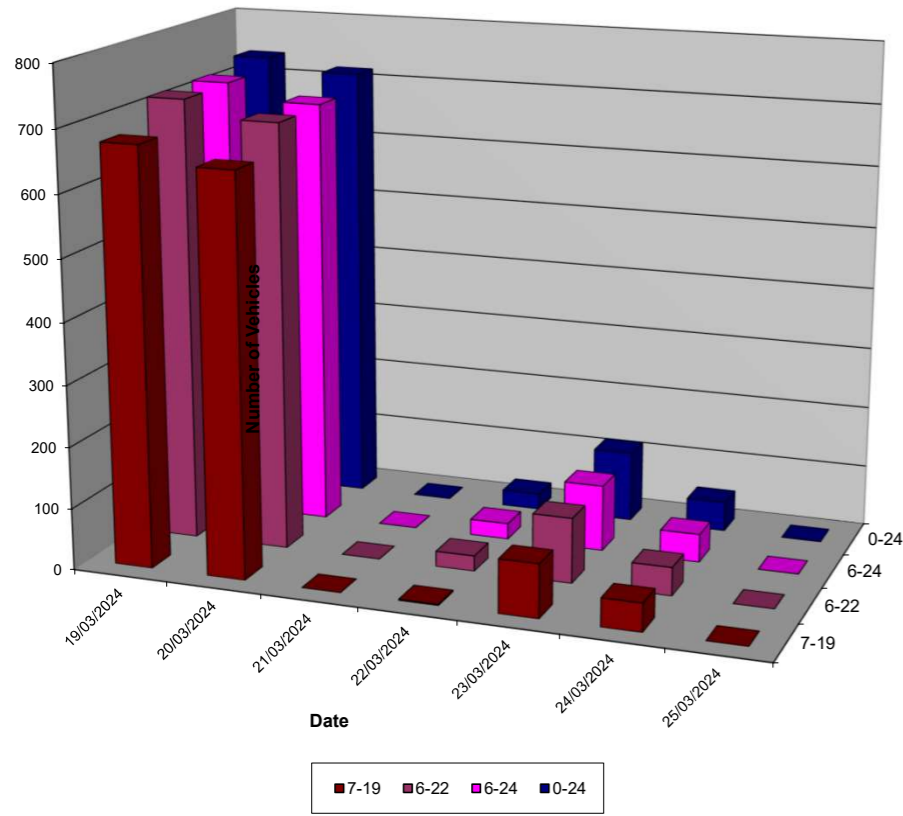
Speed (MPH)	19/03/2024	20/03/2024	21/03/2024	22/03/2024	23/03/2024	24/03/2024	25/03/2024		
	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday		
0-20	109	73	0	1	12	8	0		
21-35	563	582	0	24	95	36	0		
36-50	62	62	0	1	8	4	0		
51-100	2	0	0	0	0	0	0		
<b>TOTAL</b>	<b>736</b>	<b>717</b>	<b>0</b>	<b>26</b>	<b>115</b>	<b>48</b>	<b>0</b>		

Channel - Southbound **Vehicle Flow**

Hour	Min	19/03/2024 Tuesday	20/03/2024 Wednesday	21/03/2024 Thursday	22/03/2024 Friday	23/03/2024 Saturday	24/03/2024 Sunday	25/03/2024 Monday	5 Day Ave	7 Day Ave
0	0	1	1	0	0	3	0	0	1	2
1	0	1	5	0	0	2	1	0	3	2
2	0	4	1	0	0	0	0	0	3	3
3	0	0	7	0	0	0	1	0	7	4
4	0	3	4	0	0	2	0	0	4	3
5	0	8	6	0	0	0	0	0	7	7
6	0	21	23	0	0	13	0	0	22	19
7	0	26	34	0	0	0	1	0	30	20
8	0	26	29	0	0	6	0	0	28	20
9	0	40	30	0	0	9	7	0	35	22
10	0	44	33	0	0	5	1	0	39	21
11	0	37	29	0	0	7	2	0	33	19
12	0	53	36	0	0	10	8	0	45	27
13	0	42	43	0	0	15	4	0	43	26
14	0	66	73	0	0	14	7	0	70	40
15	0	67	58	0	0	11	7	0	63	36
16	0	131	128	0	0	5	2	0	130	67
17	0	118	118	0	0	3	2	0	118	60
18	0	19	27	0	0	2	4	0	23	13
19	0	6	9	0	2	0	1	0	6	5
20	0	2	3	0	2	4	0	0	2	3
21	0	5	4	0	5	2	0	0	5	4
22	0	15	14	0	16	0	0	0	15	15
23	0	1	2	0	1	2	0	0	1	2

Hour	7-19	6-22	6-24	0-24
7-19	675	647	0	2
6-22	718	691	0	25
6-24	719	693	0	26
0-24	736	717	0	26

**Vehicle Flow (Channel 2)**



20	0	19.8	26.5	-	27.6	30.9	-	-
21	0	23.7	31.5	-	25.1	23.4	-	-
22	0	26.4	26.5	-	26.9	-	-	-
23	0	19.9	25.1	-	23.5	23.2	-	-

Hour	10-12	14-16	0-24
10-12	25.3	25.3	-
14-16	26.8	28.4	-
0-24	27.9	27.5	-

7 Day Ave 27.2

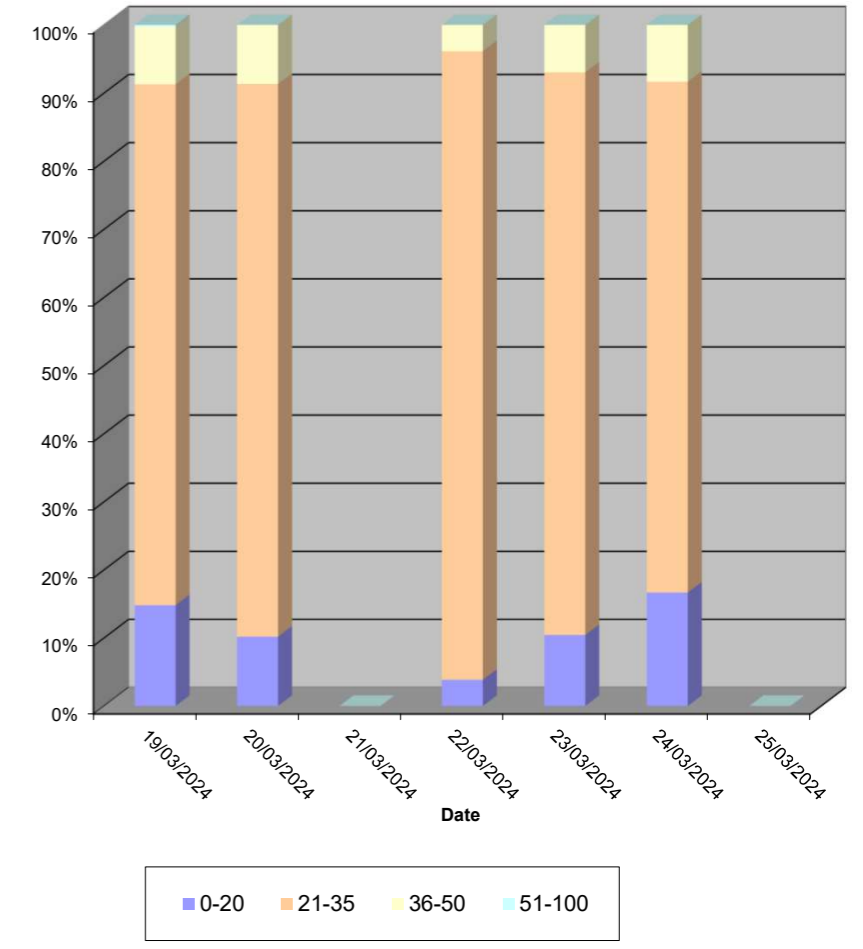
Channel - Southbound **85th Percentile**

Hour	Min	19/03/2024 Tuesday	20/03/2024 Wednesday	21/03/2024 Thursday	22/03/2024 Friday	23/03/2024 Saturday	24/03/2024 Sunday	25/03/2024 Monday
0	0	26.7	31.3	-	-	26.0	-	-
1	0	13.4	30.8	-	-	29.2	23.8	-
2	0	30.1	28.7	-	-	-	-	-
3	0	-	33.1	-	-	-	33.5	-
4	0	38.7	29.2	-	-	28.8	-	-
5	0	26.3	30.1	-	-	-	-	-
6	0	28.2	30.8	-	-	30.3	-	-
7	0	30.4	31.9	-	-	-	34.1	-
8	0	30.3	31.5	-	-	28.7	-	-
9	0	28.7	27.6	-	-	32.6	30.4	-
10	0	32.1	29.8	-	-	34.9	26.5	-
11	0	30.8	31.3	-	-	27.3	28.2	-
12	0	33.1	31.2	-	-	33.6	32.5	-
13	0	33.9	33.3	-	-	43.7	25.6	-
14	0	32.5	34.3	-	-	29.5	36.7	-
15	0	33.5	34.8	-	-	29.1	35.7	-
16	0	34.1	33.5	-	-	31.4	19.9	-
17	0	34.4	34.0	-	-	28.9	24.5	-
18	0	33.6	36.1	-	-	24.1	31.7	-
19	0	35.3	41.7	-	-	32.6	24.3	-
20	0	25.3	30.8	-	-	30.3	34.0	-
21	0	29.4	37.6	-	-	27.7	24.1	-
22	0	28.9	30.2	-	-	28.8	-	-
23	0	19.9	28.9	-	-	23.5	23.7	-

Hour	10-12	14-16	0-24
10-12	30.8	30.7	-
14-16	32.9	34.7	-
0-24	33.0	33.2	-

7 Day Ave 33.0

**Speed Summary (MPH)**



# Rainham - ATC 1 - Ferry Lane

Produced by Streetwise Services Ltd.

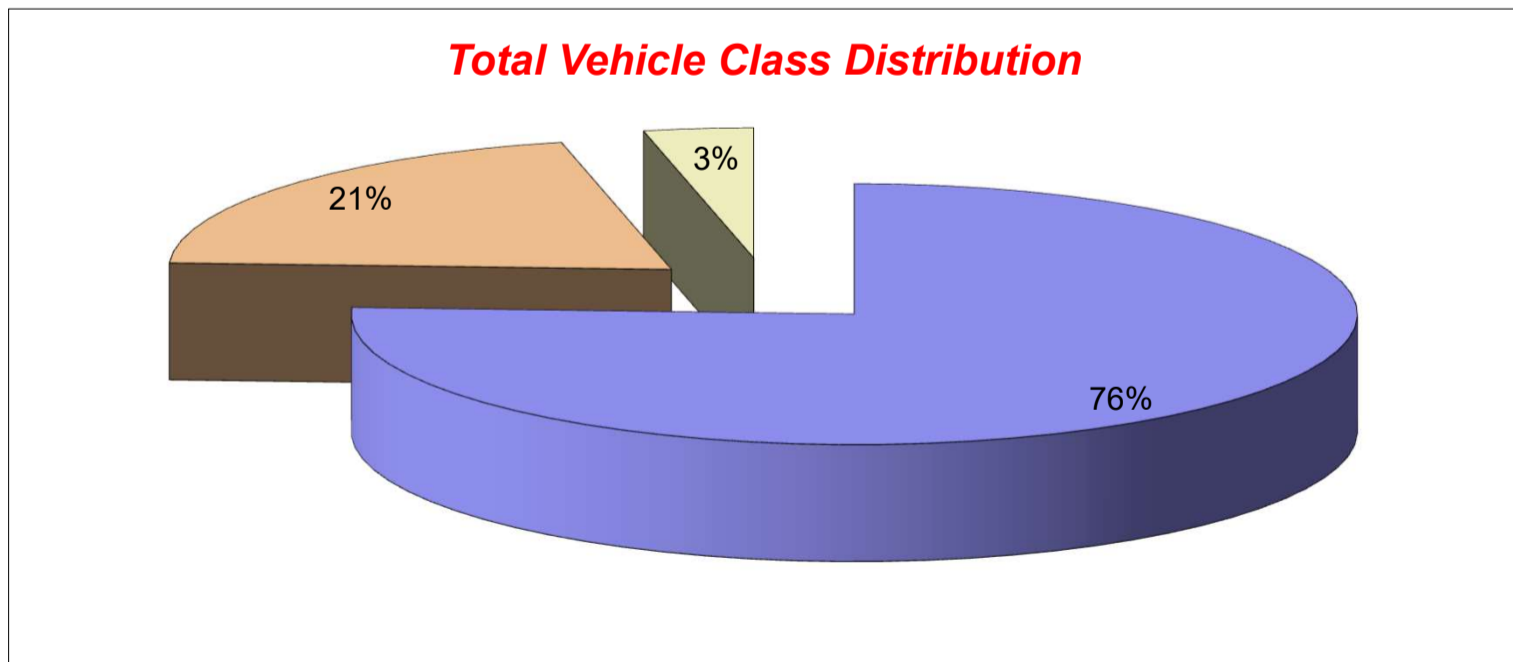


Channel - Northbound

Vehicle Class

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
19/03/2024				
7-19	467	157	22	646
6-22	519	166	25	710
6-24	522	168	25	715
0-24	577	172	28	777
20/03/2024				
7-19	450	143	26	619
6-22	514	148	28	690
6-24	520	149	28	697
0-24	575	158	30	763
21/03/2024				
7-19	0	0	0	0
6-22	0	0	0	0
6-24	0	0	0	0
0-24	0	0	0	0
22/03/2024				
7-19	0	0	0	0
6-22	17	0	0	17
6-24	21	0	0	21
0-24	21	0	0	21
23/03/2024				
7-19	62	15	0	77
6-22	77	17	1	95
6-24	79	17	1	97
0-24	97	19	1	117
24/03/2024				
7-19	34	9	2	45
6-22	35	9	2	46
6-24	35	9	2	46
0-24	42	9	2	53
25/03/2024				
7-19	0	0	0	0
6-22	0	0	0	0
6-24	0	0	0	0
0-24	0	0	0	0

Average	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
7-19	145	46	7	198
6-22	166	49	8	223
6-24	168	49	8	225
0-24	187	51	9	247



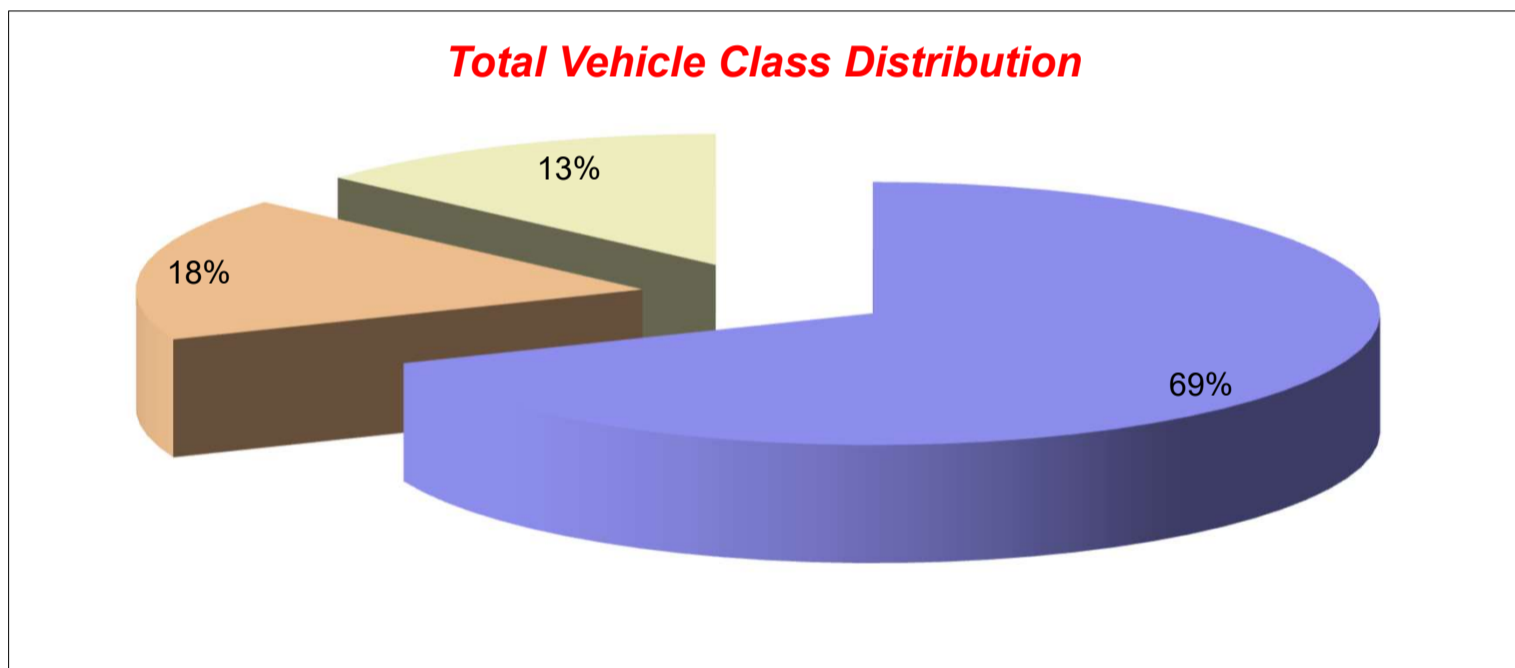
Channel - Southbound

Vehicle Class

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
19/03/2024				
7-19	497	153	157	807
6-22	523	158	176	857
6-24	538	159	194	891
0-24	548	163	216	927
20/03/2024				

7-19	490	129	19	638
6-22	520	136	21	677
6-24	536	136	21	693
0-24	550	141	26	717
21/03/2024				
7-19	0	0	0	0
6-22	0	0	0	0
6-24	0	0	0	0
0-24	0	0	0	0
22/03/2024				
7-19	0	0	0	0
6-22	9	0	0	9
6-24	26	0	0	26
0-24	26	0	0	26
23/03/2024				
7-19	78	7	2	87
6-22	94	10	2	106
6-24	96	10	2	108
0-24	102	11	2	115
24/03/2024				
7-19	32	11	2	45
6-22	33	11	2	46
6-24	33	11	2	46
0-24	35	11	2	48
25/03/2024				
7-19	0	0	0	0
6-22	0	0	0	0
6-24	0	0	0	0
0-24	0	0	0	0

Average				
7-19	157	43	26	225
6-22	168	45	29	242
6-24	176	45	31	252
0-24	180	47	35	262



# Rainham - ATC 1 - Ferry Lane

Produced by Streetwise Services Ltd.



## Channel - Northbound























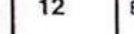


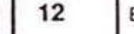





	19/03/2024 Tuesday	20/03/2024 Wednesday	21/03/2024 Thursday	22/03/2024 Friday	23/03/2024 Saturday	24/03/2024 Sunday	25/03/2024 Monday	5-DAY MEAN	7-DAY MEAN
<b>0000-2400 Vehicle Flow</b>	<b>777</b>	<b>763</b>	<b>0</b>	<b>21</b>	<b>117</b>	<b>53</b>	<b>0</b>	<b>520</b>	<b>346</b>
Mean Speed	29.3	29.8	-	30.4	30.2	30.6	-	29.8	30.0
85%ile Speed	35.5	35.6	-	33.7	36.9	37.2	-	34.9	35.8
No. Vehicles > 30 MPH Limit	348	349	0	8	59	29	0	235	159
% Vehicles > 30 MPH Limit	44.8	45.7	-	38.1	50.4	54.7	-	42.9	46.8
No. Vehicles > 45 MPH	9	9	0	2	5	3	0	7	6
% Vehicles > 45 MPH	1.2	1.2	-	9.5	4.3	5.7	-	4.0	4.4

## Channel - Southbound

	19/03/2024 Tuesday	20/03/2024 Wednesday	21/03/2024 Thursday	22/03/2024 Friday	23/03/2024 Saturday	24/03/2024 Sunday	25/03/2024 Monday	5-DAY MEAN	7-DAY MEAN
<b>0000-2400 Vehicle Flow</b>	<b>736</b>	<b>717</b>	<b>0</b>	<b>26</b>	<b>115</b>	<b>48</b>	<b>0</b>	<b>493</b>	<b>328</b>
Mean Speed	27.0	27.5	-	26.8	26.6	26.8	-	27.1	26.9
85%ile Speed	33.0	33.2	-	31.2	31.8	34.1	-	32.5	32.7
No. Vehicles > 30 MPH Limit	224	236	0	5	28	13	0	155	101
% Vehicles > 30 MPH Limit	30.4	32.9	-	19.2	24.3	27.1	-	27.5	26.8
No. Vehicles > 45 MPH	4	3	0	0	2	1	0	4	3
% Vehicles > 45 MPH	0.5	0.4	-	0.0	1.7	2.1	-	0.5	1.2

## Northbound & Southbound

	19/03/2024 Tuesday	20/03/2024 Wednesday	21/03/2024 Thursday	22/03/2024 Friday	23/03/2024 Saturday	24/03/2024 Sunday	25/03/2024 Monday	5-DAY MEAN	7-DAY MEAN
<b>0000-2400 Vehicle Flow</b>	<b>1513</b>	<b>1480</b>	<b>0</b>	<b>47</b>	<b>232</b>	<b>101</b>	<b>0</b>	<b>1013</b>	<b>675</b>
Mean Speed	28.2	28.7	-	28.4	28.4	28.8	-	28.4	28.5
85%ile Speed	34.5	34.7	-	32.8	35.9	36.4	-	34.0	34.9
No. Vehicles > 30 MPH Limit	572	585	0	13	87	42	0	390	260
% Vehicles > 30 MPH Limit	37.8	39.5	-	27.7	37.5	41.6	-	35.0	36.8
No. Vehicles > 45 MPH	13	12	0	2	7	4	0	9	8
% Vehicles > 45 MPH	0.9	0.8	-	4.3	3.0	4.0	-	2.0	2.6

Class No	Vehicle Description	Class No	Vehicle Description
1	Car, Light Van Taxi  	5	Rigid 2 Axle HGV + 2 Axle (Close coupled) Trailer 
1	Light Goods Vehicle 	6	Rigid 3 Axle HGV + 2 Axle Drawbar Trailer 
1	Car or Light Goods Vehicle + 1 Axle Caravan or Trailer  	6	Rigid 3 Axle HGV + 3 Axle Drawbar Trailer 
1	Car or Light Goods Vehicle + 2 Axle Caravan or Trailer  	7	Artic, 2 Axle Tractor + 1 Axle Semi-Trailer 
2	Rigid 2 Axle Heavy Goods Vehicle 	8	Artic, 2 Axle Tractor + 2 Axle Semi-Trailer 
3	Rigid 3 Axle Heavy Goods Vehicle 	9	Artic, 2 Axle Tractor + 3 Axle Semi-Trailer 
3	Rigid 3 Axle Heavy Goods Vehicle 	10	Artic, 3 Axle Tractor + 1 Axle Semi-Trailer 
4	Rigid 4 Axle Heavy Goods Vehicle 	10	Artic, 3 Axle Tractor + 2 Axle Semi-Trailer 
4	Rigid 4 Axle Heavy Goods Vehicle 	11	Artic, 3 Axle Tractor + 3 Axle Semi-Trailer 
5	Rigid 2 Axle HGV + 2 Axle Drawbar Trailer  	12	Bus or Coach, 2 Axle 
5	Rigid 2 Axle HGV + 3 Axle Drawbar Trailer   	12	Bus or Coach, 3 Axle 
5	Rigid 2 Axle HGV + 1 Axle Caravan or Trailer  	13	Vehicle with 7 or more Axles 



## Rainham - ATC 1 - Ferry Lane

Produced by Streetwise Services Ltd.



### Channel - Northbound

	19/03/2024 Tuesday	20/03/2024 Wednesday	21/03/2024 Thursday	22/03/2024 Friday	23/03/2024 Saturday	24/03/2024 Sunday	25/03/2024 Monday	5-DAY MEAN	7-DAY MEAN
Vehicle Flow	460	444	0	21	91	36	0	308	210
Mean Speed	28.6	30.6	0.0	10.1	29.8	29.6	0.0	23.1	25.7
85%ile Speed	35.3	36.0	-	33.7	36.4	37.3	-	35.0	35.7
No. Vehicles > 30 MPH Limit	200	198	0	8	43	21	0	135	94
% Vehicles > 30 MPH Limit	43.5	44.6	-	38.1	47.3	58.3	-	42.1	46.4
No. Vehicles > 45 MPH	6	7	0	2	4	1	0	5	4
% Vehicles > 45 MPH	1.3	1.6	-	9.5	4.4	2.8	-	4.1	3.9

### Channel - Southbound

	19/03/2024 Tuesday	20/03/2024 Wednesday	21/03/2024 Thursday	22/03/2024 Friday	23/03/2024 Saturday	24/03/2024 Sunday	25/03/2024 Monday	5-DAY MEAN	7-DAY MEAN
Vehicle Flow	435	408	0	26	101	43	0	290	203
Mean Speed	25.9	27.2	0.0	8.9	26.4	27.6	0.0	20.7	23.2
85%ile Speed	32.4	32.9	-	31.2	32.2	34.0	-	32.2	32.5
No. Vehicles > 30 MPH Limit	106	116	0	5	24	12	0	76	53
% Vehicles > 30 MPH Limit	24.4	28.4	-	19.2	23.8	27.9	-	24.0	24.7
No. Vehicles > 45 MPH	3	3	0	0	2	1	0	3	2
% Vehicles > 45 MPH	0.7	0.7	-	0.0	2.0	2.3	-	0.7	1.4

### Northbound & Southbound

	19/03/2024 Tuesday	20/03/2024 Wednesday	21/03/2024 Thursday	22/03/2024 Friday	23/03/2024 Saturday	24/03/2024 Sunday	25/03/2024 Monday	5-DAY MEAN	7-DAY MEAN
Vehicle Flow	895	852	0	47	192	79	0	598	413
Mean Speed	27.7	29.1	0.0	9.5	28.2	28.4	0.0	22.1	24.6
85%ile Speed	34.2	34.9	-	32.8	35.1	36.4	-	34.0	34.7
No. Vehicles > 30 MPH Limit	306	314	0	13	67	33	0	211	147
% Vehicles > 30 MPH Limit	34.2	36.9	-	27.7	34.9	41.8	-	32.9	35.1
No. Vehicles > 45 MPH	9	10	0	2	6	2	0	7	6
% Vehicles > 45 MPH	1.0	1.2	-	4.3	3.1	2.5	-	2.1	2.4

Note: All figures are based on data from the hours 0000-0700, 0900-1600 & 1800-2400.



## ***Rainham - ATC 1 - Ferry Lane***

Produced by Streetwise Services Ltd.

### **Installation Photo**



[Google Map Link](#)



**Rainham: Manual Traffic Survey - Tuesday, 19 March 2024**

Produced by Streetwise Services Ltd.

**Junction: A - (North East) Ferry Lane / B - (East) Car Park Access / C - (South East) Ferry Lane / D - (West) Car Park Access**

CLASSIFICATION	PCU
Car	1.0
Taxi	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0
P/CYCLE	0.2
M/CYCLE	0.4



Rainham - Manual Traffic Survey: Tuesday, 19 March 2024

Produced by Streetwise Services Ltd.

Junction: A - (North East) Ferry Lane / B - (East) Car Park Access / C - (South East) Ferry Lane / D - (West) Car Park Access

Approach: A - (North East) Ferry Lane

Table with 23 columns: TIME, Car, Taxi, LGV, OGV1, OGV2, BUS, P/CYCLE, M/CYCLE, PCU, TOTAL, Car, Taxi, LGV, OGV1, OGV2, BUS, P/CYCLE, M/CYCLE, PCU, TOTAL, Car, Taxi, LGV. Rows include hourly intervals from 07:00 to 19:00 and a final Session Total row.

A to D							A to A									
OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
1	1	0	0	0	3.8	2	0	0	0	0	0	0	0	0	0.0	0
0	3	0	0	0	8.9	5	0	0	0	0	0	0	0	0	0.0	0
0	2	0	0	0	4.6	2	0	0	0	0	0	0	0	0	0.0	0
1	3	0	0	0	9.4	5	0	0	0	0	0	0	0	0	0.0	0
2	9	0	0	0	27	14	0	0	0	0	0	0	0	0	0	0
0	4	0	0	0	11.2	6	0	0	0	0	0	0	0	0	0.0	0
0	3	0	0	0	6.9	3	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
0	5	0	0	0	12.5	6	0	0	0	0	0	0	0	0	0.0	0
0	12	0	0	0	31	15	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	4.6	2	1	0	0	0	0	0	0	0	1.0	1
1	3	0	0	0	8.4	4	0	0	0	0	0	0	0	0	0.0	0
0	3	0	0	0	7.9	4	0	0	0	0	0	0	0	0	0.0	0
0	4	0	0	0	11.2	6	0	0	0	0	0	0	0	0	0.0	0
1	12	0	0	0	32	16	1	0	0	0	0	0	0	0	1	1
1	1	0	0	0	4.8	3	0	0	0	0	0	0	0	0	0.0	0
1	1	0	0	0	4.8	3	0	0	0	0	0	0	0	0	0.0	0
1	5	0	0	0	14.0	7	0	0	0	0	0	0	0	0	0.0	0
0	6	0	0	0	14.8	7	0	0	0	0	0	0	0	0	0.0	0
3	13	0	0	0	38	20	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	5.6	3	0	0	0	0	0	0	0	0	0.0	0
0	1	0	0	0	3.3	2	0	0	0	0	0	0	0	0	0.0	0
0	2	0	0	0	6.6	4	0	0	0	0	0	0	0	0	0.0	0
0	2	0	0	0	4.6	2	0	0	0	0	0	0	0	0	0.0	0
0	7	0	0	0	20	11	0	0	0	0	0	0	0	0	0	0
0	3	0	0	0	7.9	4	0	0	1	0	0	0	0	0	1.0	1
0	2	0	0	0	5.6	3	0	0	0	0	0	0	0	0	0.0	0
0	4	0	0	0	9.2	4	0	0	0	0	0	0	0	0	0.0	0
0	1	0	0	0	2.3	1	0	0	0	0	0	0	0	0	0.0	0
0	10	0	0	0	25	12	0	0	1	0	0	0	0	0	1	1
0	1	0	0	0	4.3	3	0	0	0	0	0	0	0	0	0.0	0
0	3	0	0	0	7.9	4	0	0	0	0	0	0	0	0	0.0	0
0	4	0	0	0	10.2	5	0	0	0	0	0	0	0	0	0.0	0
2	1	0	0	0	5.3	3	0	0	0	0	0	0	0	0	0.0	0
2	9	0	0	0	28	15	0	0	0	0	0	0	0	0	0	0
0	5	0	0	0	11.5	5	0	0	0	0	0	0	0	0	0.0	0
0	2	0	0	0	5.6	3	0	0	0	0	0	0	0	0	0.0	0
0	3	0	0	0	7.9	4	0	0	0	0	0	0	0	0	0.0	0
3	3	0	0	0	11.4	6	0	0	0	0	0	0	0	0	0.0	0
3	13	0	0	0	36	18	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	6.1	3	0	0	0	0	0	0	0	0	0.0	0
0	6	0	0	0	13.8	6	0	0	0	0	0	0	0	0	0.0	0
1	12	0	0	0	31.1	15	0	0	0	0	0	0	0	0	0.0	0
0	5	0	0	0	12.5	6	0	0	0	0	0	0	0	0	0.0	0
2	25	0	0	0	64	30	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	7.6	5	0	0	1	0	0	0	0	0	1.0	1
0	2	0	0	0	6.6	4	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	0	1.0	1	0	0	0	0	0	0	0	0	0.0	0
0	1	0	0	0	2.3	1	1	0	0	0	0	0	0	0	1.0	1
0	5	0	0	0	18	11	1	0	1	0	0	0	0	0	2	2
0	1	0	0	0	2.3	1	0	0	0	0	0	0	0	0	0.0	0
0	1	0	0	0	2.3	1	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	0	1.0	1	0	0	0	0	0	0	0	0	0.0	0
0	2	0	0	0	6	3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	0	1.0	1	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	0	1.0	1	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	0	1.0	1	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
13	117	0	0	0	327	168	2	0	2	0	0	0	0	0	4	4

	From A				
TIME	Car	Taxi	LGV	OGV1	OGV2
07:00 - 07:15	31	0	1	1	1
07:15 - 07:30	28	0	4	2	3
07:30 - 07:45	29	0	2	0	4
07:45 - 08:00	47	0	5	1	4
<b>Hourly Total</b>	<b>135</b>	<b>0</b>	<b>12</b>	<b>4</b>	<b>12</b>
08:00 - 08:15	47	0	3	0	4
08:15 - 08:30	21	1	2	1	4
08:30 - 08:45	17	0	2	3	2
08:45 - 09:00	26	0	5	2	5
<b>Hourly Total</b>	<b>111</b>	<b>1</b>	<b>12</b>	<b>6</b>	<b>15</b>
09:00 - 09:15	19	0	0	1	2
09:15 - 09:30	14	0	1	2	3
09:30 - 09:45	8	0	3	2	3
09:45 - 10:00	6	0	6	1	4
<b>Hourly Total</b>	<b>47</b>	<b>0</b>	<b>10</b>	<b>6</b>	<b>12</b>
10:00 - 10:15	6	0	4	3	2
10:15 - 10:30	9	0	2	3	3
10:30 - 10:45	5	0	4	3	7
10:45 - 11:00	9	0	3	1	9
<b>Hourly Total</b>	<b>29</b>	<b>0</b>	<b>13</b>	<b>10</b>	<b>21</b>
11:00 - 11:15	2	0	5	3	2
11:15 - 11:30	5	0	1	1	1
11:30 - 11:45	6	0	4	2	3
11:45 - 12:00	2	0	3	1	5
<b>Hourly Total</b>	<b>15</b>	<b>0</b>	<b>13</b>	<b>7</b>	<b>11</b>
12:00 - 12:15	3	0	7	0	3
12:15 - 12:30	5	0	6	2	4
12:30 - 12:45	3	0	3	1	5
12:45 - 13:00	6	0	1	0	2
<b>Hourly Total</b>	<b>17</b>	<b>0</b>	<b>17</b>	<b>3</b>	<b>14</b>
13:00 - 13:15	9	0	7	2	2
13:15 - 13:30	4	0	2	3	5
13:30 - 13:45	13	0	1	0	4
13:45 - 14:00	9	0	3	3	1
<b>Hourly Total</b>	<b>35</b>	<b>0</b>	<b>13</b>	<b>8</b>	<b>12</b>
14:00 - 14:15	6	0	3	2	6
14:15 - 14:30	2	0	6	1	3
14:30 - 14:45	3	0	7	0	3
14:45 - 15:00	2	0	6	4	4
<b>Hourly Total</b>	<b>13</b>	<b>0</b>	<b>22</b>	<b>7</b>	<b>16</b>
15:00 - 15:15	9	0	3	4	2
15:15 - 15:30	3	0	5	1	6
15:30 - 15:45	2	0	4	1	12
15:45 - 16:00	6	0	2	0	6
<b>Hourly Total</b>	<b>20</b>	<b>0</b>	<b>14</b>	<b>6</b>	<b>26</b>
16:00 - 16:15	3	0	4	0	2
16:15 - 16:30	6	0	4	1	2
16:30 - 16:45	6	0	2	1	0
16:45 - 17:00	6	0	0	0	1
<b>Hourly Total</b>	<b>21</b>	<b>0</b>	<b>10</b>	<b>2</b>	<b>5</b>
17:00 - 17:15	3	0	2	1	1
17:15 - 17:30	3	0	1	0	2
17:30 - 17:45	1	0	1	0	0
17:45 - 18:00	1	0	1	0	0
<b>Hourly Total</b>	<b>8</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>3</b>
18:00 - 18:15	2	0	1	0	0
18:15 - 18:30	0	0	1	0	0
18:30 - 18:45	1	0	0	0	0
18:45 - 19:00	2	0	0	0	1
<b>Hourly Total</b>	<b>5</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>
<b>Session Total</b>	<b>456</b>	<b>1</b>	<b>143</b>	<b>60</b>	<b>148</b>

					To A									
BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
0	0	0	35.8	34	6	0	3	0	2	0	0	0	13.6	11
0	0	0	41.9	37	3	0	1	1	1	0	0	0	7.8	6
0	0	0	40.2	35	3	0	3	1	3	0	0	0	14.4	10
0	0	2	63.5	59	2	0	2	1	2	0	0	0	10.1	7
0	0	2	181	165	14	0	9	3	8	0	0	0	46	34
0	0	1	59.6	55	1	0	2	0	5	0	0	0	14.5	8
0	1	0	34.9	30	4	0	1	0	5	0	0	0	16.5	10
0	1	0	28.3	25	1	0	1	1	5	0	0	0	15.0	8
0	0	0	45.5	38	4	0	5	1	2	0	0	0	15.1	12
0	2	1	168	148	10	0	9	2	17	0	0	0	61	38
0	0	0	25.1	22	7	0	2	0	4	0	0	0	18.2	13
0	0	0	24.9	20	7	0	3	4	4	0	0	0	25.2	18
0	0	0	20.9	16	4	0	5	1	4	0	0	0	19.7	14
0	0	0	22.7	17	2	1	2	3	6	0	0	0	23.3	14
0	0	0	94	75	20	1	12	8	18	0	0	0	86	59
0	0	0	19.1	15	5	0	3	1	3	0	0	0	16.4	12
0	0	0	22.4	17	2	0	4	2	2	0	0	0	13.6	10
0	0	0	29.6	19	4	0	5	4	6	0	0	0	28.8	19
0	0	0	34.2	22	3	0	3	2	7	0	0	0	25.1	15
0	0	0	105	73	14	0	15	9	18	0	0	0	84	56
0	0	1	16.5	13	5	0	4	1	6	0	0	0	24.3	16
0	0	0	9.8	8	2	0	4	1	1	0	0	0	9.8	8
0	0	0	19.9	15	2	0	4	3	3	0	0	0	17.4	12
0	0	0	18.0	11	8	0	6	2	7	0	0	0	33.1	23
0	0	1	64	47	17	0	18	7	17	0	0	0	85	59
0	0	0	16.9	13	7	0	9	1	2	0	0	0	22.1	19
0	0	0	23.2	17	6	0	6	2	6	0	0	0	28.8	20
0	0	0	19.0	12	8	0	3	0	6	0	0	0	24.8	17
0	1	0	11.8	10	4	0	1	2	3	0	0	0	14.9	10
0	1	0	71	52	25	0	19	5	17	0	0	0	91	66
0	0	0	23.6	20	8	0	0	0	4	0	0	0	17.2	12
0	0	1	22.4	15	7	0	6	2	4	0	0	1	25.6	20
0	0	1	23.6	19	5	0	0	2	2	0	0	0	12.6	9
0	0	0	18.8	16	9	1	1	4	7	0	0	0	33.1	22
0	0	2	88	70	29	1	7	8	17	0	0	1	89	63
0	0	0	25.8	17	36	0	5	1	1	0	0	0	44.8	43
0	0	0	16.4	12	4	0	3	0	4	0	0	1	16.6	12
0	0	0	16.9	13	7	0	2	3	6	0	0	0	27.3	18
1	0	0	25.2	17	6	0	5	1	0	0	0	0	12.5	12
1	0	0	84	59	53	0	15	5	11	0	0	1	101	85
0	0	0	22.6	18	14	0	4	3	4	1	0	1	34.1	27
0	0	0	23.3	15	6	0	3	1	4	0	0	0	19.7	14
0	0	0	35.1	19	19	0	6	1	6	0	0	0	40.3	32
0	0	0	21.8	14	7	0	8	1	4	0	0	0	25.7	20
0	0	0	103	66	46	0	21	6	18	1	0	1	120	93
0	0	0	11.6	9	44	0	3	0	4	0	0	0	56.2	51
0	0	0	16.1	13	45	0	4	1	2	0	0	1	55.5	53
0	0	0	9.5	9	36	0	1	0	1	0	0	0	39.3	38
0	0	0	8.3	7	29	0	2	0	0	0	0	1	31.4	32
0	0	0	46	38	154	0	10	1	7	0	0	2	182	174
0	0	0	8.8	7	36	0	2	0	0	0	3	1	39.0	42
0	0	0	8.6	6	27	0	7	1	0	0	0	0	35.5	35
0	0	0	2.0	2	28	0	4	1	0	0	0	0	33.5	33
0	0	0	2.0	2	12	0	1	0	0	0	0	0	13.0	13
0	0	0	21	17	103	0	14	2	0	0	3	1	121	123
0	0	0	3.0	3	11	0	0	0	0	0	0	0	11.0	11
0	0	0	1.0	1	4	0	0	0	0	0	1	0	4.2	5
0	0	0	1.0	1	2	0	0	0	0	0	0	0	2.0	2
0	0	0	4.3	3	2	0	0	0	0	0	0	0	2.0	2
0	0	0	9	8	19	0	0	0	0	0	1	0	19	20
1	3	6	1035	818	504	2	149	56	148	1	4	6	1085	870



Rainham - Manual Traffic Survey: Tuesday, 19 March 2024

Produced by Streetwise Services Ltd.

Junction: A - (North East) Ferry Lane / B - (East) Car Park Access / C - (South East) Ferry Lane / D - (West) Car Park Access

Approach: B - (East) Car Park Access

TIME	B to C										B to D										Car	Taxi	LGV	OGV1						
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL										
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	1
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
10:30 - 10:45	1	0	0	0	0	0	0	0	1.0	1	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	1	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	1	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
13:00 - 13:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
13:15 - 13:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
13:30 - 13:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	1	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
14:00 - 14:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
14:45 - 15:00	1	0	0	0	0	0	0	0	1.0	1	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	1	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
16:00 - 16:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	0	0																										









Rainham - Manual Traffic Survey: Tuesday, 19 March 2024

Produced by Streetwise Services Ltd.

Junction: A - (North East) Ferry Lane / B - (East) Car Park Access / C - (South East) Ferry Lane / D - (West) Car Park Access

Approach: C - (South East) Ferry Lane

TIME	C to D										C to A										Car	Taxi	LGV	OGV1
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL				
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	6	0	2	0	1	0	0	0	4.0	9	0	0	0	0
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	3	0	1	0	0	0	0	0	4.0	4	0	0	0	1
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	3	0	3	1	0	0	0	0	7.5	7	0	0	0	0
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	2	0	2	0	0	0	0	0	4.0	4	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	14	0	8	1	1	0	0	0	26	24	0	0	0	1
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	1	0	2	0	1	0	0	0	5.3	4	0	0	0	0
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	4	0	0	0	1	0	0	0	6.3	5	0	0	0	0
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	0	1	1	1	0	0	0	4.8	3	0	0	0	0
08:45 - 09:00	0	0	0	1	0	0	0	0	1.5	1	4	0	5	1	0	0	0	0	10.5	10	0	0	0	0
Hourly Total	0	0	0	1	0	0	0	0	2	1	9	0	8	2	3	0	0	0	27	22	0	0	0	0
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	5	0	1	0	0	0	0	0	6.0	6	0	0	0	0
09:15 - 09:30	0	0	0	0	1	0	0	0	2.3	1	6	0	2	4	1	0	0	0	16.3	13	0	0	0	0
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	3	0	5	1	2	0	0	0	14.1	11	0	0	0	0
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	1	1	2	3	1	0	0	0	10.8	8	0	0	0	0
Hourly Total	0	0	0	0	1	0	0	0	2	1	15	1	10	8	4	0	0	0	47	38	0	0	0	0
10:00 - 10:15	1	0	0	0	1	0	0	0	3.3	2	3	0	3	0	0	0	0	0	6.0	6	0	0	0	0
10:15 - 10:30	0	0	0	0	2	0	0	0	4.6	2	2	0	4	1	0	0	0	0	7.5	7	0	0	0	0
10:30 - 10:45	0	0	0	0	1	0	0	0	2.3	1	4	0	4	4	3	0	0	0	20.9	15	0	0	0	0
10:45 - 11:00	0	0	0	0	0	0	0	0	0.0	0	3	0	3	1	2	0	0	0	12.1	9	0	0	0	0
Hourly Total	1	0	0	0	4	0	0	0	10	5	12	0	14	6	5	0	0	0	47	37	0	0	0	0
11:00 - 11:15	0	0	0	0	0	0	0	0	0.0	0	4	0	4	0	2	0	0	0	12.6	10	0	0	0	0
11:15 - 11:30	0	0	1	1	0	0	0	0	2.5	2	2	0	4	1	1	0	0	0	9.8	8	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0.0	0	1	0	3	3	2	0	0	0	13.1	9	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0.0	0	6	0	4	2	2	0	0	0	17.6	14	0	0	0	0
Hourly Total	0	0	1	1	0	0	0	0	3	2	13	0	15	6	7	0	0	0	53	41	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0.0	0	7	0	6	1	1	0	0	0	16.8	15	0	0	1	0
12:15 - 12:30	0	0	0	0	1	0	0	0	2.3	1	6	0	5	1	1	0	0	0	14.8	13	0	0	0	0
12:30 - 12:45	0	0	0	0	0	0	0	0	0.0	0	8	0	3	0	1	0	0	0	13.3	12	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0.0	0	3	0	1	2	3	0	0	0	13.9	9	0	0	0	0
Hourly Total	0	0	0	0	1	0	0	0	2	1	24	0	15	4	6	0	0	0	59	49	0	0	1	0
13:00 - 13:15	0	0	0	0	0	0	0	0	0.0	0	8	0	0	0	1	0	0	0	10.3	9	0	0	0	0
13:15 - 13:30	0	0	0	0	0	0	0	0	0.0	0	6	0	6	2	1	0	0	1	17.7	16	0	0	0	0
13:30 - 13:45	0	0	0	0	0	0	0	0	0.0	0	5	0	0	2	1	0	0	0	10.3	8	0	0	0	0
13:45 - 14:00	0	0	0	0	1	0	0	0	2.3	1	7	1	1	4	2	0	0	0	19.6	15	0	0	0	0
Hourly Total	0	0	0	0	1	0	0	0	2	1	26	1	7	8	5	0	0	1	58	48	0	0	0	0
14:00 - 14:15	0	0	0	0	0	0	0	0	0.0	0	36	0	4	1	0	0	0	0	41.5	41	0	0	0	0
14:15 - 14:30	0	0	0	0	0	0	0	0	0.0	0	4	0	3	0	0	0	0	1	7.4	8	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0.0	0	7	0	0	1	0	0	0	0	8.5	8	0	0	0	0
14:45 - 15:00	0	0	0	0	0	0	0	0	0.0	0	6	0	4	1	0	0	0	0	11.5	11	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	53	0	11	3	0	0	0	1	69	68	0	0	0	0
15:00 - 15:15	0	0	0	0	0	0	0	0	0.0	0	14	0	3	0	0	1	0	1	19.4	19	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0.0	0	6	0	3	1	1	0	0	0	12.8	11	0	0	0	0
15:30 - 15:45	0	0	0	0	1	0	0	0	2.3	1	18	0	4	0	1	0	0	0	24.3	23	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0.0	0	6	0	8	0	1	0	0	0	16.3	15	0	0	0	0
Hourly Total	0	0	0	0	1	0	0	0	2	1	44	0	18	1	3	1	0	1	73	68	0	0	0	0
16:00 - 16:15	0	0	0	0	0	0	0	0	0.0	0	33	0	1	0	0	0	0	0	34.0	34	0	0	0	0
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	36	0	2	1	0	0	0	1	39.9	40	0	0	0	0
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	33	0	1	0	1	0	0	0	36.3	35	0	0	0	0
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	27	0	1	0	0	0	0	1	28.4	29	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	129	0	5	1	1	0	0	2	139	138	0	0	0	0
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	35	0	1	0	0	0	3	1	37.0	40	0	0	0	0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	25	0	6	1	0	0	0	0	32.5	32	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	28	0	4	1	0	0	0	0	33.5	33	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	10	0	1	0	0	0	0	0	11.0	11	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	98	0	12	2	0	0	3	1	114	116	0	0	0	0
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	11	0	0	0	0	0	0	0	11.0	11	0	0	0	0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	4	0	0	0	0	0	1	0	4.2	5	0	0	0	0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	2	0	0	0	0	0	0	0	2.0	2	0	0	0	0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	2	0	0	0	0	0	0	0	2.0	2	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	1	0	19	20	0	0	0	0
Session Total	1	0	1	2	8	0	0	0	23	12	456	2	123	42	35	1	4	6	730	669	0	0	1	1



			To C									
M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
0	10.3	9	31	0	1	0	0	0	0	0	32.0	32
0	5.5	5	27	0	3	2	0	0	0	0	33.0	32
0	7.5	7	29	0	2	0	2	0	0	0	35.6	33
0	4.0	4	47	0	4	0	1	0	0	2	54.1	54
0	27	25	134	0	10	2	3	0	0	2	155	151
0	5.3	4	45	0	2	0	0	0	0	1	47.4	48
0	6.3	5	21	1	2	2	1	0	1	0	29.5	28
0	5.8	4	18	0	2	3	2	0	1	0	29.3	26
0	12.0	11	25	0	5	2	0	0	0	0	33.0	32
0	29	24	109	1	11	7	3	0	2	1	139	134
0	6.0	6	18	0	0	1	0	0	0	0	19.5	19
0	18.6	14	14	0	1	1	0	0	0	0	16.5	16
0	14.1	11	8	0	3	2	0	0	0	0	14.0	13
0	10.8	8	5	0	5	1	0	0	0	0	11.5	11
0	50	39	45	0	9	5	0	0	0	0	62	59
0	9.3	8	5	0	4	2	1	0	0	0	14.3	12
0	12.1	9	9	0	1	2	3	0	0	0	19.9	15
0	23.2	16	4	0	4	2	2	0	0	0	15.6	12
0	12.1	9	8	0	3	1	3	0	0	0	19.4	15
0	57	42	26	0	12	7	9	0	0	0	69	54
0	12.6	10	2	0	4	3	0	0	0	1	10.9	10
0	12.3	10	4	0	1	1	0	0	0	0	6.5	6
0	13.1	9	4	0	4	2	1	0	0	0	13.3	11
0	17.6	14	2	0	3	1	3	0	0	0	13.4	9
0	56	43	12	0	12	7	4	0	0	1	44	36
0	17.8	16	3	0	5	0	0	0	0	0	8.0	8
0	17.1	14	5	0	5	2	2	0	0	0	17.6	14
0	13.3	12	3	0	3	1	1	0	0	0	9.8	8
0	13.9	9	6	0	1	0	1	0	1	0	9.5	9
0	62	51	17	0	14	3	4	0	1	0	45	39
0	10.3	9	8	0	6	2	1	0	0	0	19.3	17
1	17.7	16	4	0	1	3	2	0	0	1	14.5	11
0	10.3	8	12	0	1	0	0	0	0	1	13.4	14
0	21.9	16	8	0	3	1	0	0	0	0	12.5	12
1	60	49	32	0	11	6	3	0	0	2	60	54
0	41.5	41	6	0	3	2	1	0	0	0	14.3	12
1	7.4	8	2	0	5	1	1	0	0	0	10.8	9
0	8.5	8	3	0	6	0	0	0	0	0	9.0	9
0	11.5	11	3	0	6	1	1	1	0	0	14.8	12
1	69	68	14	0	20	4	3	1	0	0	49	42
1	19.4	19	9	0	3	3	0	0	0	0	16.5	15
0	12.8	11	3	0	5	1	0	0	0	0	9.5	9
0	26.6	24	2	0	2	0	0	0	0	0	4.0	4
0	16.3	15	5	0	2	0	1	0	0	0	9.3	8
1	75	69	19	0	12	4	1	0	0	0	39	36
0	34.0	34	2	0	1	0	0	0	0	0	3.0	3
1	39.9	40	6	0	2	1	0	0	0	0	9.5	9
0	36.3	35	5	0	2	1	0	0	0	0	8.5	8
1	28.4	29	5	0	0	0	0	0	0	0	5.0	5
2	139	138	18	0	5	2	0	0	0	0	26	25
1	37.0	40	3	0	2	1	0	0	0	0	6.5	6
0	32.5	32	3	0	2	0	1	0	1	0	7.5	7
0	33.5	33	1	0	1	0	0	0	0	0	2.0	2
0	11.0	11	1	0	0	0	0	0	0	0	1.0	1
1	114	116	8	0	5	1	1	0	1	0	17	16
0	11.0	11	2	0	1	0	0	0	0	0	3.0	3
0	4.2	5	0	0	0	0	0	0	0	0	0.0	0
0	2.0	2	0	0	0	0	0	0	0	0	0.0	0
0	2.0	2	1	0	0	0	1	0	0	0	3.3	2
0	19	20	3	0	1	0	1	0	0	0	6	5
6	757	684	437	1	122	48	32	1	4	6	711	651



Rainham - Manual Traffic Survey: Tuesday, 19 March 2024

Produced by Streetwise Services Ltd.

Junction: A - (North East) Ferry Lane / B - (East) Car Park Access / C - (South East) Ferry Lane / D - (West) Car Park Access

Approach: D - (West) Car Park Access

TIME	D to A										D to B										Car	Taxi	LGV	OGV1
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL				
07:00 - 07:15	0	0	1	0	1	0	0	0	3.3	2	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
07:15 - 07:30	0	0	0	0	1	0	0	0	2.3	1	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
07:30 - 07:45	0	0	0	0	3	0	0	0	6.9	3	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
07:45 - 08:00	0	0	0	1	2	0	0	0	6.1	3	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	0	0	1	1	7	0	0	0	19	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 - 08:15	0	0	0	0	4	0	0	0	9.2	4	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
08:15 - 08:30	0	0	1	0	4	0	0	0	10.2	5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	1
08:30 - 08:45	1	0	0	0	4	0	0	0	10.2	5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
08:45 - 09:00	0	0	0	0	2	0	0	0	4.6	2	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	1	0	1	0	14	0	0	0	34	16	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00 - 09:15	1	0	1	0	4	0	0	0	11.2	6	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
09:15 - 09:30	1	0	1	0	3	0	0	0	8.9	5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
09:30 - 09:45	1	0	0	0	2	0	0	0	5.6	3	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0
09:45 - 10:00	1	0	0	0	5	0	0	0	12.5	6	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	4	0	2	0	14	0	0	0	38	20	0	0	0	0	0	0	0	0	0	0	0	0	1	0
10:00 - 10:15	2	0	0	1	3	0	0	0	10.4	6	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
10:15 - 10:30	0	0	0	1	2	0	0	0	6.1	3	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
10:30 - 10:45	0	0	1	0	3	0	0	0	7.9	4	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
10:45 - 11:00	0	0	0	1	5	0	0	0	13.0	6	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	2	0	1	3	13	0	0	0	37	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	1	0	0	1	4	0	0	0	11.7	6	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
11:30 - 11:45	1	0	1	0	1	0	0	0	4.3	3	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
11:45 - 12:00	1	0	2	0	5	0	0	0	14.5	8	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	3	0	3	1	10	0	0	0	31	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 12:15	0	0	1	0	1	0	0	0	3.3	2	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
12:15 - 12:30	0	0	1	1	5	0	0	0	14.0	7	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
12:30 - 12:45	0	0	0	0	5	0	0	0	11.5	5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
12:45 - 13:00	1	0	0	0	0	0	0	0	1.0	1	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	1	0	2	1	11	0	0	0	30	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	0	0	3	0	0	0	6.9	3	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
13:15 - 13:30	1	0	0	0	3	0	0	0	7.9	4	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
13:30 - 13:45	0	0	0	0	1	0	0	0	2.3	1	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
13:45 - 14:00	1	0	0	0	5	0	0	0	12.5	6	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	2	0	0	0	12	0	0	0	30	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00 - 14:15	0	0	1	0	1	0	0	0	3.3	2	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
14:15 - 14:30	0	0	0	0	4	0	0	0	9.2	4	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
14:30 - 14:45	0	0	2	2	6	0	0	0	18.8	10	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
14:45 - 15:00	0	0	1	0	0	0	0	0	1.0	1	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	0	0	4	2	11	0	0	0	32	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	1	3	4	0	0	0	14.7	8	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
15:15 - 15:30	0	0	0	0	3	0	0	0	6.9	3	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
15:30 - 15:45	0	0	2	1	5	0	0	0	15.0	8	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
15:45 - 16:00	1	0	0	1	3	0	0	0	9.4	5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	1	0	3	5	15	0	0	0	46	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00 - 16:15	11	0	1	0	4	0	0	0	21.2	16	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
16:15 - 16:30	9	0	2	0	2	0	0	0	15.6	13	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
16:30 - 16:45	3	0	0	0	0	0	0	0	3.0	3	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
16:45 - 17:00	1	0	1	0	0	0	0	0	2.0	2	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	24	0	4	0	6	0	0	0	42	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00 - 17:15	1	0	1	0	0	0	0	0	2.0	2	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
17:15 - 17:30	2	0	1	0	0	0	0	0	3.0	3	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
17:45 - 18:00	2	0	0	0	0	0	0	0	2.0	2	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	5	0	2	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Session Total	43	0	23	13	113	0	0	0	345	192	0	0	0	0	0	0	0	0	0	0	0	2	1	0



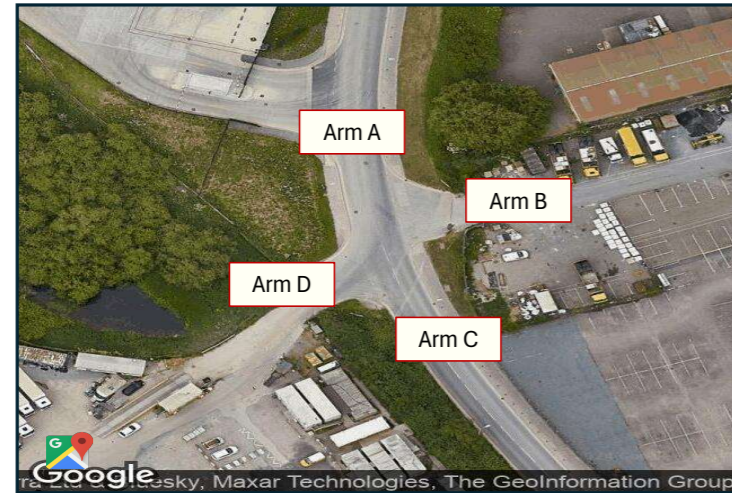


			To D									
M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
0	3.3	2	0	0	0	1	1	0	0	0	3.8	2
0	2.3	1	1	0	1	0	3	0	0	0	8.9	5
0	6.9	3	0	0	0	0	2	0	0	0	4.6	2
0	6.1	3	0	0	1	1	3	0	0	0	9.4	5
0	19	9	1	0	2	2	9	0	0	0	27	14
0	9.2	4	1	0	1	0	4	0	0	0	11.2	6
0	11.7	6	0	0	0	0	3	0	0	0	6.9	3
0	10.2	5	0	0	0	0	0	0	0	0	0.0	0
0	4.6	2	1	0	0	1	5	0	0	0	14.0	7
0	36	17	2	0	1	1	12	0	0	0	32	16
0	11.2	6	0	0	0	0	2	0	0	0	4.6	2
0	8.9	5	0	0	0	1	4	0	0	0	10.7	5
0	6.6	4	0	0	1	0	3	0	0	0	7.9	4
0	12.5	6	1	0	1	0	4	0	0	0	11.2	6
0	39	21	1	0	2	1	13	0	0	0	34	17
0	10.4	6	2	0	0	1	2	0	0	0	8.1	5
0	8.4	4	0	0	1	1	3	0	0	0	9.4	5
0	7.9	4	1	0	0	1	6	0	0	0	16.3	8
0	13.0	6	1	0	0	0	6	0	0	0	14.8	7
0	40	20	4	0	1	3	17	0	0	0	49	25
0	11.7	6	0	0	1	0	2	0	0	0	5.6	3
0	0.0	0	1	0	1	1	1	0	0	0	5.8	4
0	4.3	3	2	0	0	0	2	0	0	0	6.6	4
0	14.5	8	0	0	0	0	2	0	0	0	4.6	2
0	31	17	3	0	2	1	7	0	0	0	23	13
0	3.3	2	0	0	1	0	3	0	0	0	7.9	4
0	14.0	7	0	0	1	0	3	0	0	0	7.9	4
0	11.5	5	0	0	0	0	4	0	0	0	9.2	4
0	1.0	1	0	0	0	0	1	0	0	0	2.3	1
0	30	15	0	0	2	0	11	0	0	0	27	13
0	6.9	3	1	0	1	0	1	0	0	0	4.3	3
0	7.9	4	0	0	1	0	3	0	0	0	7.9	4
0	2.3	1	1	0	0	0	4	0	0	0	10.2	5
0	12.5	6	0	0	0	2	2	0	0	0	7.6	4
0	30	14	2	0	2	2	10	0	0	0	30	16
0	3.3	2	0	0	0	0	5	0	0	0	11.5	5
0	9.2	4	0	0	1	0	2	0	0	0	5.6	3
0	18.8	10	0	0	1	0	3	0	0	0	7.9	4
0	1.0	1	0	0	0	3	3	0	0	0	11.4	6
0	32	17	0	0	2	3	13	0	0	0	36	18
0	14.7	8	0	0	0	1	2	0	0	0	6.1	3
0	6.9	3	0	0	0	0	6	0	0	0	13.8	6
0	19.6	10	0	0	2	1	15	0	0	0	38.0	18
0	9.4	5	1	0	0	0	5	0	0	0	12.5	6
0	51	26	1	0	2	2	28	0	0	0	70	33
0	21.2	16	1	0	2	0	2	0	0	0	7.6	5
0	17.9	14	0	0	2	0	3	0	0	0	8.9	5
0	3.0	3	1	0	0	0	0	0	0	0	1.0	1
0	2.0	2	0	0	0	0	1	0	0	0	2.3	1
0	44	35	2	0	4	0	6	0	0	0	20	12
0	2.0	2	0	0	0	0	1	0	0	0	2.3	1
0	4.2	5	0	0	0	0	1	0	0	0	2.3	1
0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
0	2.0	2	0	0	1	0	0	0	0	0	1.0	1
0	8	9	0	0	1	0	2	0	0	0	6	3
0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
0	0.0	0	0	0	1	0	0	0	0	0	1.0	1
0	0.0	0	1	0	0	0	0	0	0	0	1.0	1
0	0.0	0	1	0	0	0	0	0	0	0	1.0	1
0	0	0	2	0	1	0	0	0	0	0	3	3
0	358	200	18	0	22	15	128	0	0	0	357	183

## Rainham - Manual Traffic Survey: Tuesday, 19 March 2024

Produced by Streetwise Services Ltd.

Junction: **A - (North East) Ferry Lane / B - (East) Car Park Access / C - (South East) Ferry Lane / D - (West) Car Park Access**



Matrix Totals:

Show single Session:

Custom Start / End:

Show Peak Times:

		Arm Destination					
		A	B	C	D	Total	% Total
Arm Origin	A	4	3	643	168	818	100.00%
	B	5	0	2	0	7	100.00%
	C	669	2	1	12	684	100.00%
	D	192	0	5	3	200	100.00%
	Total	870	5	651	183		
% Total		100.00%	100.00%	100.00%	100.00%		

Classification	Include
Car	Yes
Taxi	Yes
LGV	Yes
OGV1	Yes
OGV2	Yes
BUS	Yes
P/CYCLE	Yes
M/CYCLE	Yes



**Rainham: Queue Length Survey - Tuesday, 19 March 2024**

Produced by Streetwise Services Ltd.

**Junction: A - (North East) Ferry Lane / B - Onslip A13 / C - (South West) Ferry Lane / D - Offslip A13**

CLASSIFICATION	PCU
Car	1.0
Taxi	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0
P/CYCLE	0.2
M/CYCLE	0.4



Rainham - Manual Traffic and Queue Length Survey: Tuesday, 19 March 2024

Produced by Streetwise Services Ltd.

Junction: A - (North East) Ferry Lane / B - Onslip A13 / C - (South West) Ferry Lane / D - Offslip A13

Approach: A - (North East) Ferry Lane

TIME	A to B										A to C										Car	Taxi	LGV	OGV1
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL				
07:00 - 07:15	27	0	13	5	0	1	0	0	49.5	46	25	0	7	4	2	2	1	2	47.6	43	0	0	0	0
07:15 - 07:30	25	0	17	2	4	1	0	1	56.6	50	47	0	12	0	5	0	0	1	70.9	65	0	0	0	0
07:30 - 07:45	38	0	14	1	3	2	0	0	64.4	58	40	0	8	4	0	0	2	54.8	54	0	0	0	0	
07:45 - 08:00	34	0	12	1	1	0	0	0	49.8	48	57	0	4	1	2	0	0	1	67.5	65	0	0	0	0
Hourly Total	124	0	56	9	8	4	0	1	220	202	169	0	31	9	9	2	1	6	241	227	0	0	0	0
08:00 - 08:15	31	0	10	2	1	0	0	0	46.3	44	39	0	10	7	2	0	0	1	64.5	59	0	0	0	0
08:15 - 08:30	28	0	8	5	5	0	0	0	55.0	46	29	1	11	7	1	1	2	2	57.0	54	0	0	0	0
08:30 - 08:45	24	1	12	7	6	0	0	0	61.3	50	34	0	10	3	1	0	0	1	51.2	49	0	0	0	0
08:45 - 09:00	24	0	8	3	8	0	0	0	54.9	43	34	0	7	8	1	0	0	0	55.3	50	0	0	0	0
Hourly Total	107	1	38	17	20	0	0	0	218	183	136	1	38	25	5	1	2	4	228	212	0	0	0	0
09:00 - 09:15	26	0	4	3	0	0	0	0	34.5	33	32	1	13	6	2	0	0	0	59.6	54	0	0	0	0
09:15 - 09:30	28	0	6	4	7	0	0	0	56.1	45	29	0	12	6	4	0	0	0	59.2	51	0	0	0	0
09:30 - 09:45	26	0	10	3	5	1	0	0	54.0	45	37	0	8	8	3	1	0	1	66.3	58	0	0	0	0
09:45 - 10:00	21	1	11	2	8	1	0	0	56.4	44	30	1	7	7	1	0	3	52.0	49	0	0	0	0	
Hourly Total	101	1	31	12	20	2	0	0	201	167	128	2	40	27	10	1	0	4	237	212	0	0	0	0
10:00 - 10:15	6	0	10	2	5	1	0	0	32.5	24	44	0	9	10	6	0	0	0	81.8	69	0	0	0	0
10:15 - 10:30	25	0	11	7	1	1	0	0	50.8	45	37	0	10	10	6	0	0	1	76.2	64	0	0	0	0
10:30 - 10:45	18	0	8	3	5	0	0	0	42.0	34	46	5	15	5	2	0	1	0	78.3	74	0	0	0	0
10:45 - 11:00	15	0	7	3	6	0	0	0	40.3	31	39	1	9	7	5	0	0	0	71.0	61	0	0	0	0
Hourly Total	64	0	36	15	17	2	0	0	166	134	166	6	43	32	19	0	1	1	307	268	0	0	0	0
11:00 - 11:15	28	1	15	2	3	0	0	0	53.9	49	26	3	9	5	1	0	2	48.6	46	0	0	0	0	
11:15 - 11:30	25	0	11	2	3	0	0	0	45.9	41	32	1	14	4	4	2	0	0	66.2	57	0	0	0	0
11:30 - 11:45	26	0	3	4	2	0	0	0	39.6	35	36	1	9	4	2	2	0	0	60.6	54	0	0	0	0
11:45 - 12:00	27	0	7	4	6	0	0	0	53.8	44	39	4	17	6	3	1	0	1	78.3	71	0	0	0	0
Hourly Total	106	1	36	12	14	0	0	0	193	169	133	9	49	19	10	5	0	3	254	228	0	0	0	0
12:00 - 12:15	28	0	9	3	2	0	0	0	46.1	42	33	2	18	6	5	0	0	0	73.5	64	0	0	0	0
12:15 - 12:30	31	0	8	1	1	0	0	0	42.8	41	41	1	16	4	3	1	0	0	72.9	66	0	0	0	0
12:30 - 12:45	26	0	6	2	1	1	0	0	39.3	36	36	1	11	7	3	1	0	0	67.4	59	0	0	0	0
12:45 - 13:00	32	0	14	5	5	1	0	0	67.0	57	40	0	13	9	3	1	1	0	75.6	67	0	0	0	0
Hourly Total	117	0	37	11	9	2	0	0	195	176	150	4	58	26	14	3	1	0	289	256	0	0	0	0
13:00 - 13:15	26	0	9	3	7	1	0	0	57.6	46	44	0	18	4	6	2	0	2	86.6	76	0	0	0	0
13:15 - 13:30	22	0	10	4	3	0	0	0	44.9	39	39	2	14	4	2	0	0	1	66.0	62	0	0	0	0
13:30 - 13:45	31	0	11	4	7	1	0	0	66.1	54	36	3	12	7	2	1	0	2	68.9	63	0	0	0	0
13:45 - 14:00	25	0	10	7	3	0	0	0	52.4	45	30	0	4	3	3	0	0	0	45.4	40	0	0	0	0
Hourly Total	104	0	40	18	20	2	0	0	221	184	149	5	48	18	13	3	0	5	267	241	0	0	0	0
14:00 - 14:15	26	0	12	4	2	0	0	0	48.6	44	44	0	16	6	1	0	2	72.1	69	0	0	0	0	
14:15 - 14:30	33	0	17	2	4	0	0	0	62.2	56	41	1	14	6	5	2	0	0	80.5	69	0	0	0	0
14:30 - 14:45	29	0	7	5	2	0	0	0	48.1	43	33	4	11	7	3	0	0	0	65.4	58	0	0	0	0
14:45 - 15:00	28	0	16	3	2	0	0	0	53.1	49	23	1	9	2	5	2	0	1	51.9	43	0	0	0	0
Hourly Total	116	0	52	14	10	0	0	0	212	192	141	6	50	21	14	4	0	3	270	239	0	0	0	0
15:00 - 15:15	43	0	19	4	3	0	0	1	75.3	70	35	0	9	9	4	0	0	0	66.7	57	0	0	0	0
15:15 - 15:30	36	0	11	7	2	1	0	0	64.1	57	29	2	12	1	3	0	0	0	51.4	47	0	0	0	0
15:30 - 15:45	48	0	12	1	1	0	0	0	63.8	62	38	0	18	3	3	0	0	1	67.8	63	0	0	0	0
15:45 - 16:00	43	0	16	4	0	0	0	0	65.0	63	38	0	12	2	1	0	2	56.1	55	0	0	0	0	
Hourly Total	170	0	58	16	6	1	0	1	268	252	140	2	51	15	11	0	3	242	222	0	0	0	0	
16:00 - 16:15	51	0	14	5	2	0	0	0	77.1	72	26	1	14	3	1	0	3	49.0	48	0	0	0	0	
16:15 - 16:30	62	1	14	2	2	0	0	0	84.6	81	37	2	9	4	2	0	1	59.0	55	0	0	0	0	
16:30 - 16:45	61	1	13	1	2	0	0	2	81.9	80	39	1	11	3	0	0	2	56.3	56	0	0	0	0	
16:45 - 17:00	59	0	8	2	1	0	0	0	72.3	70	31	0	11	1	0	0	0	43.5	43	0	0	0	0	
Hourly Total	233	2	49	10	7	0	0	2	316	303	133	4	45	11	3	0	6	208	202	0	0	0	0	
17:00 - 17:15	83	0	15	0	0	0	0	3	99.2	101	53	0	7	2	0	0	2	63.8	64	0	0	0	0	
17:15 - 17:30	54	0	8	2	0	0	0	1	65.4	65	41	0	7	3	0	0	0	52.5	51	0	0	0	0	
17:30 - 17:45	67	0	8	3	1	2	0	0	85.8	81	35	0	9	0	0	0	0	44.0	44	0	0	0	0	
17:45 - 18:00	43	0	3	1	0	2	0	0	51.5	49	42	0	9	0	0	0	1	51.4	52	0	0	0	0	
Hourly Total	247	0	34	6	1	4	0	4	302	296	171	0	32	5	0	0	3	212	211	0	0	0	0	
18:00 - 18:15	45	0	1	0	0	0	0	0	46.0	46	31	0	3	0	0	0	0	34.0	34	0	0	0	0	
18:15 - 18:30	32	0	6	0	0	0	0	0	38.0	38	15	2	6	0	0	0	0	23.0	23	0	0	0	0	
18:30 - 18:45	46	0	4	0	1	1	0	0	54.3	52	32	0	3	0	1	0	0	37.0	36	0	0	0	0	
18:45 - 19:00	40	0	6	0	0	1	0	0	48.0	47	29	1	2	0	1	0	0	34.0	33	0	0	0	0	
Hourly Total	163	0	17	0	1	2	0	0	186	183	107	3	14	0	0	2	0	0	128	126	0	0	0	0
Session Total	1652	5	484	140	133	19	0	8	2698	2441	1723	42	499	208	108	21	5	38	2883	2644	0	0	0	0





												To A	
M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	
2	97.1	89	123	1	41	4	9	5	0	1	202.1	184	
2	127.5	115	130	1	46	9	7	0	0	3	207.8	196	
2	119.2	112	139	1	48	8	3	0	0	0	206.9	199	
1	117.3	113	104	0	48	15	7	0	0	3	191.8	177	
7	461	429	496	3	183	36	26	5	0	7	809	756	
1	110.8	103	99	0	26	13	7	0	0	0	160.6	145	
2	112.0	100	86	2	24	5	3	0	0	2	127.2	122	
1	112.5	99	77	2	27	12	9	0	0	1	145.1	128	
0	110.2	93	92	0	27	6	5	0	0	1	139.9	131	
4	446	395	354	4	104	36	24	0	0	4	573	526	
0	96.1	89	81	0	22	12	8	0	0	0	139.4	123	
0	115.3	96	63	0	23	8	10	0	0	0	121.0	104	
1	120.3	103	72	0	21	12	5	0	0	3	123.7	113	
3	109.4	94	51	2	22	14	5	2	0	1	111.9	97	
4	441	382	267	2	88	46	28	2	0	4	496	437	
0	116.6	94	50	2	31	12	7	2	0	0	121.1	104	
1	127.0	109	57	1	28	17	5	0	0	0	123.0	108	
0	121.3	109	56	0	28	6	9	1	0	3	116.9	103	
0	111.3	92	76	0	32	5	8	0	0	2	134.7	123	
1	476	404	239	3	119	40	29	3	0	5	496	438	
2	102.5	95	72	2	29	9	7	0	0	0	132.6	119	
0	112.1	98	78	1	23	10	5	3	0	1	134.9	121	
0	100.2	89	70	0	24	14	9	2	0	1	140.1	120	
1	132.1	115	74	1	38	9	5	0	0	0	138.0	127	
3	447	397	294	4	114	42	26	5	0	2	546	487	
0	119.6	106	63	2	29	8	7	1	0	1	124.5	111	
0	115.7	107	83	1	30	15	5	0	0	1	148.4	135	
0	106.7	95	65	0	29	11	8	2	0	0	132.9	115	
0	142.6	124	74	0	26	5	5	2	0	0	123.0	112	
0	485	432	285	3	114	39	25	5	0	2	529	473	
2	144.2	122	75	1	25	11	7	1	0	1	136.0	121	
1	112.4	102	77	0	29	14	5	0	0	1	138.9	126	
2	135.0	117	88	2	38	14	7	2	0	2	169.9	153	
0	97.8	85	70	2	36	10	7	0	0	0	139.1	125	
5	489	426	310	5	128	49	26	3	0	4	584	525	
2	120.7	113	108	0	35	12	5	0	0	1	172.9	161	
0	142.7	125	82	2	34	13	6	1	0	0	153.3	138	
0	115.0	102	87	0	27	13	11	1	0	1	161.2	140	
1	105.0	92	87	0	37	11	7	0	0	1	157.0	143	
3	483	432	364	2	133	49	29	2	0	3	644	582	
1	142.0	127	80	3	34	18	6	2	0	0	161.8	143	
0	115.5	104	76	2	37	7	6	0	0	0	139.3	128	
1	131.6	125	103	0	25	9	10	1	0	0	166.5	148	
2	121.1	118	88	0	29	17	5	0	1	0	154.2	140	
4	510	474	347	5	125	51	27	3	1	0	622	559	
3	126.1	120	119	3	31	9	3	0	1	4	175.2	170	
1	143.6	136	99	1	32	16	3	0	0	4	164.5	155	
4	138.2	136	126	0	34	6	6	1	0	1	185.2	174	
0	115.8	113	110	1	28	8	3	0	0	1	158.3	151	
8	524	505	454	5	125	39	15	1	1	10	683	650	
5	164.0	166	123	0	25	4	1	0	4	4	158.7	161	
1	117.9	116	118	1	23	8	1	0	1	3	157.7	155	
0	129.8	125	141	0	22	5	3	0	0	1	177.8	172	
1	102.9	101	120	0	16	2	0	0	0	4	140.6	142	
7	515	508	502	1	86	19	5	0	5	12	635	630	
0	81.0	81	111	0	22	5	0	0	0	0	140.5	138	
0	62.0	62	105	0	16	1	0	2	0	2	127.3	126	
0	91.3	88	74	0	17	2	0	3	0	1	100.4	97	
0	82.0	80	72	1	13	4	0	2	0	2	96.8	94	
0	316	311	362	1	68	12	0	7	0	5	465	455	
46	5593	5095	4274	38	1387	458	260	36	7	58	7081	6518	





			To B									
M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
0	0.0	0	29	0	16	5	4	1	0	0	63.7	55
0	0.0	0	27	0	24	4	16	1	0	1	96.2	73
0	0.0	0	40	0	20	5	17	2	0	0	110.6	84
0	0.0	0	38	0	14	3	8	0	0	0	74.9	63
0	0.0	0	134	0	74	17	45	4	0	1	345	275
0	0.0	0	32	0	15	4	5	0	0	0	64.5	56
0	0.0	0	30	0	12	8	12	0	0	0	81.6	62
0	0.0	0	27	1	14	7	13	0	0	0	82.4	62
0	0.0	0	27	0	14	3	12	0	0	0	73.1	56
0	0.0	0	116	1	55	22	42	0	0	0	302	236
0	0.0	0	30	0	7	4	9	0	0	0	63.7	50
0	0.0	0	34	0	6	4	17	0	0	0	85.1	61
0	0.0	0	31	0	15	4	13	1	0	0	83.9	64
0	0.0	0	22	1	14	4	13	1	0	0	74.9	55
0	0.0	0	117	1	42	16	52	2	0	0	308	230
0	0.0	0	9	0	14	4	15	1	0	0	65.5	43
0	0.0	0	29	0	18	7	10	1	0	0	82.5	65
0	0.0	0	24	0	18	4	14	0	0	1	80.6	61
0	0.0	0	20	0	14	5	16	0	0	0	78.3	55
0	0.0	0	82	0	64	20	55	2	0	1	307	224
0	0.0	0	35	1	18	7	10	0	0	1	87.9	72
0	0.0	0	33	0	14	2	12	0	0	1	78.0	62
0	0.0	0	31	0	12	5	11	0	0	1	76.2	60
0	0.0	0	37	0	9	8	12	0	0	0	85.6	66
0	0.0	0	136	1	53	22	45	0	0	3	328	260
0	0.0	0	41	0	15	6	8	0	0	1	83.8	71
0	0.0	0	39	0	13	5	10	0	0	1	82.9	68
0	0.0	0	33	0	8	2	7	1	0	0	62.1	51
0	0.0	0	39	0	16	10	14	1	0	0	104.2	80
0	0.0	0	152	0	52	23	39	2	0	2	333	270
0	0.0	0	34	0	13	5	17	1	0	0	95.6	70
0	0.0	0	28	0	15	10	7	0	0	0	74.1	60
0	0.0	0	38	0	16	9	13	1	0	0	99.4	77
0	0.0	0	47	0	13	10	14	0	0	0	107.2	84
0	0.0	0	147	0	57	34	51	2	0	0	376	291
0	0.0	0	55	0	18	10	10	0	0	0	111.0	93
0	0.0	0	42	0	18	7	13	0	0	1	100.8	81
0	0.0	0	37	0	10	7	9	0	0	0	78.2	63
0	0.0	0	39	0	23	6	8	0	0	0	89.4	76
0	0.0	0	173	0	69	30	40	0	0	1	379	313
0	0.0	0	68	0	25	7	15	0	0	2	138.8	117
0	0.0	0	52	0	17	10	11	1	0	0	111.3	91
0	0.0	0	75	0	23	1	9	0	0	0	120.2	108
0	0.0	0	60	0	22	6	9	0	0	0	111.7	97
0	0.0	0	255	0	87	24	44	1	0	2	482	413
0	0.0	0	86	0	20	7	10	0	0	1	139.9	124
0	0.0	0	89	1	20	2	10	0	0	1	136.4	123
0	0.0	0	119	1	21	3	7	0	0	2	162.4	153
0	0.0	0	97	0	11	2	3	0	0	1	118.3	114
0	0.0	0	391	2	72	14	30	0	0	5	557	514
0	0.0	0	143	0	21	0	3	0	0	3	172.1	170
0	0.0	0	88	0	13	2	1	0	0	1	106.7	105
0	0.0	0	96	0	13	3	2	2	0	0	122.1	116
0	0.0	0	59	0	9	1	1	2	0	0	75.8	72
0	0.0	0	386	0	56	6	7	4	0	4	477	463
0	0.0	0	54	0	2	1	2	0	0	0	62.1	59
0	0.0	0	58	0	8	0	0	0	0	0	66.0	66
0	0.0	0	50	0	5	0	2	1	0	0	61.6	58
0	0.0	0	47	0	6	1	0	1	0	0	56.5	55
0	0.0	0	209	0	21	2	4	2	0	0	246	238
0	0.0	0	2298	5	702	230	454	19	0	19	4440	3727



**Rainham - Manual Traffic and Queue Length Survey: Tuesday, 19 March 2024**

Produced by Streetwise Services Ltd.

**Junction:** A - (North East) Ferry Lane / B - Onslip A13 / C - (South West) Ferry Lane / D - Offslip A13

**Approach:** C - (South West) Ferry Lane

TIME	C to D										C to A													
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	105	1	34	4	8	5	0	1	174.8	158	2	0	3	0
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	114	1	35	6	7	0	0	2	175.9	165	2	0	7	2
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	124	1	41	6	2	0	0	0	179.6	174	2	0	6	4
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	75	0	38	6	5	0	0	1	133.9	125	4	0	2	2
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>418</b>	<b>3</b>	<b>148</b>	<b>22</b>	<b>22</b>	<b>5</b>	<b>0</b>	<b>4</b>	<b>664</b>	<b>622</b>	<b>10</b>	<b>0</b>	<b>18</b>	<b>8</b>
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	72	0	22	8	5	0	0	0	117.5	107	1	0	5	2
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	62	1	22	3	3	0	0	1	96.8	92	2	0	4	3
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	51	0	15	9	7	0	0	0	95.6	82	3	0	2	0
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	52	0	13	6	4	0	0	1	83.6	76	3	0	6	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>237</b>	<b>1</b>	<b>72</b>	<b>26</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>394</b>	<b>357</b>	<b>9</b>	<b>0</b>	<b>17</b>	<b>5</b>
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	44	0	16	9	6	0	0	0	87.3	75	4	0	2	1
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	40	0	11	4	6	0	0	0	70.8	61	6	0	0	0
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	48	0	14	9	4	0	0	2	85.5	77	5	0	5	1
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	24	1	13	8	2	1	0	1	57.0	50	1	0	3	2
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>156</b>	<b>1</b>	<b>54</b>	<b>30</b>	<b>18</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>301</b>	<b>263</b>	<b>16</b>	<b>0</b>	<b>10</b>	<b>4</b>
10:00 - 10:15	0	0	0	0	0	0	0	0	0.0	0	27	1	19	5	5	0	0	0	66.0	57	3	0	4	2
10:15 - 10:30	0	0	0	0	0	0	0	0	0.0	0	30	1	13	12	4	0	0	0	71.2	60	4	0	7	0
10:30 - 10:45	0	0	0	0	0	0	0	0	0.0	0	30	0	14	2	7	0	0	2	63.9	55	6	0	10	1
10:45 - 11:00	0	0	0	0	0	0	0	0	0.0	0	45	0	12	3	8	0	0	2	80.7	70	5	0	7	2
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>132</b>	<b>2</b>	<b>58</b>	<b>22</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>282</b>	<b>242</b>	<b>18</b>	<b>0</b>	<b>28</b>	<b>5</b>
11:00 - 11:15	0	0	0	0	0	0	0	0	0.0	0	33	1	16	6	4	0	0	0	68.2	60	4	0	3	5
11:15 - 11:30	0	0	0	0	0	0	0	0	0.0	0	48	0	11	4	3	0	0	1	72.3	67	7	0	3	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0.0	0	33	0	18	3	6	0	0	0	69.3	60	4	0	8	1
11:45 - 12:00	0	0	0	0	0	0	0	0	0.0	0	39	0	24	6	2	0	0	0	76.6	71	10	0	2	4
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>153</b>	<b>1</b>	<b>69</b>	<b>19</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>286</b>	<b>258</b>	<b>25</b>	<b>0</b>	<b>16</b>	<b>10</b>
12:00 - 12:15	0	0	0	0	0	0	0	0	0.0	0	36	0	15	6	4	1	0	0	71.2	62	13	0	6	3
12:15 - 12:30	0	0	0	0	0	0	0	0	0.0	0	43	1	12	7	2	0	0	1	71.5	66	8	0	5	4
12:30 - 12:45	0	0	0	0	0	0	0	0	0.0	0	42	0	15	5	6	0	0	0	78.3	68	7	0	2	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0.0	0	41	0	13	3	3	0	0	0	65.4	60	7	0	2	5
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>162</b>	<b>1</b>	<b>55</b>	<b>21</b>	<b>15</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>286</b>	<b>256</b>	<b>35</b>	<b>0</b>	<b>15</b>	<b>12</b>
13:00 - 13:15	0	0	0	0	0	0	0	0	0.0	0	36	1	14	7	5	0	0	0	73.0	63	8	0	4	2
13:15 - 13:30	0	0	0	0	0	0	0	0	0.0	0	42	0	14	5	4	0	0	1	73.1	66	6	0	5	5
13:30 - 13:45	0	0	0	0	0	0	0	0	0.0	0	47	1	15	8	5	1	0	1	88.9	78	4	0	5	5
13:45 - 14:00	0	0	0	0	0	0	0	0	0.0	0	29	0	18	4	5	0	0	0	64.5	56	21	0	3	3
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>154</b>	<b>2</b>	<b>61</b>	<b>24</b>	<b>19</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>300</b>	<b>263</b>	<b>39</b>	<b>0</b>	<b>17</b>	<b>15</b>
14:00 - 14:15	0	0	0	0	0	0	0	0	0.0	0	65	0	17	6	5	0	0	0	102.5	93	28	0	6	6
14:15 - 14:30	0	0	0	0	0	0	0	0	0.0	0	41	0	21	6	3	0	0	0	77.9	71	9	0	1	5
14:30 - 14:45	0	0	0	0	0	0	0	0	0.0	0	50	0	15	10	9	1	0	0	102.7	85	8	0	3	2
14:45 - 15:00	0	0	0	0	0	0	0	0	0.0	0	43	0	19	7	4	0	0	0	81.7	73	11	0	7	3
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>199</b>	<b>0</b>	<b>72</b>	<b>29</b>	<b>21</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>365</b>	<b>322</b>	<b>56</b>	<b>0</b>	<b>17</b>	<b>16</b>
15:00 - 15:15	0	0	0	0	0	0	0	0	0.0	0	39	2	20	10	4	2	0	0	89.2	77	23	0	6	3
15:15 - 15:30	0	0	0	0	0	0	0	0	0.0	0	41	2	19	3	3	0	0	0	73.4	68	16	0	6	3
15:30 - 15:45	0	0	0	0	0	0	0	0	0.0	0	57	0	12	7	9	1	0	0	102.2	86	26	0	11	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0.0	0	42	0	12	8	3	0	1	0	73.1	66	17	0	6	2
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>179</b>	<b>4</b>	<b>63</b>	<b>28</b>	<b>19</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>338</b>	<b>297</b>	<b>82</b>	<b>0</b>	<b>29</b>	<b>8</b>
16:00 - 16:15	0	0	0	0	0	0	0	0	0.0	0	64	0	16	3	3	0	1	2	92.4	89	35	0	6	2
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	63	0	16	10	2	0	0	1	99.0	92	27	0	5	0
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	79	0	22	4	6	0	0	1	121.2	112	58	0	8	2
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	61	0	17	7	0	0	0	1	88.9	86	37	0	3	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>267</b>	<b>0</b>	<b>71</b>	<b>24</b>	<b>11</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>402</b>	<b>379</b>	<b>157</b>	<b>0</b>	<b>22</b>	<b>4</b>
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	70	0	12	2	1	0	4	1	88.5	90	59	0	6	0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	68	0	15	7	1	0	1	0	96.0	92	34	0	5	0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	75	0	11	5	3	0	0	1	100.8	95	29	0	5	0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	63	0	11	0	0	0	0	3	75.2	77	16	0	6	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>276</b>	<b>0</b>	<b>49</b>	<b>14</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>5</b>	<b>361</b>	<b>354</b>	<b>138</b>	<b>0</b>	<b>22</b>	<b>0</b>
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	62	0	14	5	0	0	0	0	83.5	81	9	0	1	1
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	61	0	7	0	0	1	0	0	70.0	69	26	0	2	0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	35	0	12	1	0	1	0	0	50.5	49	4	0	1	0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	43	0	6	4	0	1	0	0	57.0	54	7	0	0	1
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>201</b>	<b>0</b>	<b>39</b>	<b>10</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>261</b>	<b>253</b>	<b>46</b>	<b>0</b>	<b>4</b>	<b>2</b>
<b>Session Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>2534</b>	<b>15</b>	<b>811</b>	<b>269</b>	<b>188</b>	<b>15</b>								

C to B						C to C									
OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
4	0	0	0	14.2	9	0	0	0	0	0	0	0	0	0.0	0
12	0	0	0	39.6	23	0	0	0	0	0	0	0	0	0.0	0
14	0	0	0	46.2	26	0	0	0	1	0	0	0	0	1.5	1
7	0	0	0	25.1	15	1	0	0	0	0	0	0	0	1.0	1
37	0	0	0	125	73	1	0	0	1	0	0	0	0	3	2
4	0	0	0	18.2	12	0	0	0	0	1	0	0	0	2.3	1
7	0	0	0	26.6	16	0	0	0	0	0	0	0	0	0.0	0
7	0	0	0	21.1	12	0	0	0	0	0	0	0	0	0.0	0
4	0	0	0	18.2	13	0	0	0	0	0	0	0	0	0.0	0
22	0	0	0	84	53	0	0	0	0	1	0	0	0	2	1
9	0	0	0	28.2	16	1	0	0	0	0	0	0	0	1.0	1
10	0	0	0	29.0	16	1	0	0	0	0	0	0	0	1.0	1
8	0	0	0	29.9	19	0	0	0	0	0	0	0	0	0.0	0
5	0	0	0	18.5	11	0	0	0	0	0	0	0	0	0.0	0
32	0	0	0	106	62	2	0	0	0	0	0	0	0	2	2
10	0	0	0	33.0	19	0	0	0	0	0	0	0	0	0.0	0
9	0	0	0	31.7	20	0	0	0	0	0	0	0	0	0.0	0
9	0	0	1	38.6	27	0	0	0	0	0	0	0	0	0.0	0
10	0	0	0	38.0	24	0	0	0	0	0	0	0	0	0.0	0
38	0	0	1	141	90	0	0	0	0	0	0	0	0	0	0
7	0	0	1	31.0	20	0	0	0	0	1	0	0	0	2.3	1
8	0	0	1	28.8	19	0	0	0	0	0	0	0	0	0.0	0
8	0	0	1	32.3	22	1	0	0	0	0	0	0	0	1.0	1
6	0	0	0	31.8	22	0	0	0	0	0	0	0	0	0.0	0
29	0	0	3	124	83	1	0	0	0	1	0	0	0	3	2
6	0	0	1	37.7	29	1	0	0	0	0	0	0	0	1.0	1
9	0	0	1	40.1	27	0	0	0	0	0	0	0	0	0.0	0
6	0	0	0	22.8	15	1	0	0	0	0	0	0	0	1.0	1
9	0	0	0	37.2	23	0	0	0	0	0	0	0	0	0.0	0
30	0	0	2	138	94	2	0	0	0	0	0	0	0	2	2
10	0	0	0	38.0	24	0	0	0	0	0	0	0	0	0.0	0
4	0	0	0	27.7	20	1	0	0	0	0	0	0	0	1.0	1
6	0	0	0	30.3	20	0	0	0	0	0	0	0	0	0.0	0
11	0	0	0	53.8	38	1	0	0	1	0	0	0	0	2.5	2
31	0	0	0	150	102	2	0	0	1	0	0	0	0	4	3
8	0	0	0	61.4	48	0	0	0	0	0	0	0	0	0.0	0
9	0	0	1	38.6	25	0	0	0	0	0	0	0	0	0.0	0
6	0	0	0	27.8	19	1	0	0	0	0	0	0	0	1.0	1
6	0	0	0	36.3	27	0	0	0	0	0	0	0	0	0.0	0
29	0	0	1	164	119	1	0	0	0	0	0	0	0	1	1
12	0	0	1	61.5	45	0	0	0	0	0	0	0	0	0.0	0
8	0	0	0	44.9	33	0	0	0	0	0	0	0	0	0.0	0
7	0	0	0	53.1	44	0	0	0	0	0	0	0	0	0.0	0
9	0	0	0	46.7	34	0	0	1	0	0	0	0	0	1.0	1
36	0	0	1	206	156	0	0	1	0	0	0	0	0	1	1
8	0	0	1	62.8	52	0	0	0	0	0	0	0	0	0.0	0
8	0	0	1	50.8	41	1	0	0	0	0	0	0	0	1.0	1
5	0	0	0	80.5	73	0	0	0	0	0	0	0	0	0.0	0
2	0	0	1	45.0	43	0	0	0	0	0	0	0	0	0.0	0
23	0	0	3	239	209	1	0	0	0	0	0	0	0	1	1
3	0	0	0	71.9	68	1	0	0	0	0	0	0	0	1.0	1
1	0	0	0	41.3	40	0	0	0	0	0	0	0	0	0.0	0
1	0	0	0	36.3	35	0	0	0	0	0	0	0	0	0.0	0
1	0	0	0	24.3	23	0	0	0	0	0	0	0	0	0.0	0
6	0	0	0	174	166	1	0	0	0	0	0	0	0	1	1
2	0	0	0	16.1	13	2	0	0	0	0	0	0	0	2.0	2
0	0	0	0	28.0	28	0	0	0	0	0	0	0	0	0.0	0
1	0	0	0	7.3	6	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	8.5	8	0	0	0	0	0	0	0	0	0.0	0
3	0	0	0	60	55	2	0	0	0	0	0	0	0	2	2
316	0	0	11	1711	1262	13	0	1	2	2	0	0	0	22	18

TIME	From C						
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE
07:00 - 07:15	107	1	37	4	12	5	0
07:15 - 07:30	116	1	42	8	19	0	0
07:30 - 07:45	126	1	47	11	16	0	0
07:45 - 08:00	80	0	40	8	12	0	0
Hourly Total	429	3	166	31	59	5	0
08:00 - 08:15	73	0	27	10	10	0	0
08:15 - 08:30	64	1	26	6	10	0	0
08:30 - 08:45	54	0	17	9	14	0	0
08:45 - 09:00	55	0	19	6	8	0	0
Hourly Total	246	1	89	31	42	0	0
09:00 - 09:15	49	0	18	10	15	0	0
09:15 - 09:30	47	0	11	4	16	0	0
09:30 - 09:45	53	0	19	10	12	0	0
09:45 - 10:00	25	1	16	10	7	1	0
Hourly Total	174	1	64	34	50	1	0
10:00 - 10:15	30	1	23	7	15	0	0
10:15 - 10:30	34	1	20	12	13	0	0
10:30 - 10:45	36	0	24	3	16	0	0
10:45 - 11:00	50	0	19	5	18	0	0
Hourly Total	150	2	86	27	62	0	0
11:00 - 11:15	37	1	19	11	12	0	0
11:15 - 11:30	55	0	14	4	11	0	0
11:30 - 11:45	38	0	26	4	14	0	0
11:45 - 12:00	49	0	26	10	8	0	0
Hourly Total	179	1	85	29	45	0	0
12:00 - 12:15	50	0	21	9	10	1	0
12:15 - 12:30	51	1	17	11	11	0	0
12:30 - 12:45	50	0	17	5	12	0	0
12:45 - 13:00	48	0	15	8	12	0	0
Hourly Total	199	1	70	33	45	1	0
13:00 - 13:15	44	1	18	9	15	0	0
13:15 - 13:30	49	0	19	10	8	0	0
13:30 - 13:45	51	1	20	13	11	1	0
13:45 - 14:00	51	0	21	8	16	0	0
Hourly Total	195	2	78	40	50	1	0
14:00 - 14:15	93	0	23	12	13	0	0
14:15 - 14:30	50	0	22	11	12	0	0
14:30 - 14:45	59	0	18	12	15	1	0
14:45 - 15:00	54	0	26	10	10	0	0
Hourly Total	256	0	89	45	50	1	0
15:00 - 15:15	62	2	26	13	16	2	0
15:15 - 15:30	57	2	25	6	11	0	0
15:30 - 15:45	83	0	23	7	16	1	0
15:45 - 16:00	59	0	19	10	12	0	1
Hourly Total	261	4	93	36	55	3	1
16:00 - 16:15	99	0	22	5	11	0	1
16:15 - 16:30	91	0	21	10	10	0	0
16:30 - 16:45	137	0	30	6	11	0	0
16:45 - 17:00	98	0	20	7	2	0	0
Hourly Total	425	0	93	28	34	0	1
17:00 - 17:15	130	0	18	2	4	0	4
17:15 - 17:30	102	0	20	7	2	0	1
17:30 - 17:45	104	0	16	5	4	0	0
17:45 - 18:00	79	0	17	0	1	0	0
Hourly Total	415	0	71	14	11	0	5
18:00 - 18:15	73	0	15	6	2	0	0
18:15 - 18:30	87	0	9	0	0	1	0
18:30 - 18:45	39	0	13	1	1	1	0
18:45 - 19:00	50	0	6	5	0	1	0
Hourly Total	249	0	43	12	3	3	0
Session Total	3178	15	1027	360	506	15	7



			To C									
M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
1	189.0	167	36	0	9	4	8	2	1	2	74.4	62
2	215.5	188	65	0	15	2	10	0	0	1	106.4	93
0	227.3	201	52	0	11	10	3	0	0	2	85.7	78
1	160.0	141	74	0	7	1	6	0	0	2	97.1	90
4	792	697	227	0	42	17	27	2	1	7	364	323
0	138.0	120	50	0	13	8	6	0	0	2	89.6	79
1	123.4	108	39	1	13	8	5	1	2	2	79.7	71
0	116.7	94	46	0	13	6	5	0	0	1	79.9	71
1	101.8	89	50	0	10	10	7	0	0	0	91.1	77
2	480	411	185	1	49	32	23	1	2	5	340	298
0	116.5	92	43	1	15	7	6	0	0	0	83.3	72
0	100.8	78	39	0	15	6	9	0	0	1	84.1	70
2	115.4	96	49	0	12	9	11	1	0	1	102.2	83
1	75.5	61	41	1	15	8	11	0	0	5	96.3	81
3	408	327	172	2	57	30	37	1	0	7	366	306
0	99.0	76	53	0	14	13	11	0	0	0	111.8	91
0	102.9	80	42	0	15	14	13	0	0	1	108.3	85
3	102.5	82	52	6	20	7	13	0	1	0	118.6	99
2	118.7	94	46	1	13	8	16	0	0	0	108.8	84
5	423	332	193	7	62	42	53	0	1	1	448	359
1	101.5	81	32	3	11	5	10	0	0	2	77.3	63
2	101.1	86	39	1	17	5	13	2	0	0	98.4	77
1	102.6	83	49	1	15	7	7	2	0	0	95.6	81
0	108.4	93	47	4	21	8	9	1	0	1	107.1	91
4	414	343	167	9	64	25	39	5	0	3	378	312
1	109.9	92	45	2	21	10	8	0	0	1	101.8	87
2	111.6	93	44	1	22	7	7	3	0	0	99.6	84
0	102.1	84	41	1	15	9	15	1	0	1	107.4	83
0	102.6	83	43	1	17	12	11	1	1	1	106.9	87
3	426	352	173	5	75	38	41	5	1	3	416	341
0	111.0	87	49	0	20	9	9	2	0	2	108.0	91
1	101.8	87	44	2	19	4	20	0	0	1	117.4	90
1	119.2	98	47	3	17	8	11	1	0	2	107.1	89
0	120.8	96	37	0	7	10	9	0	0	0	79.7	63
2	453	368	177	5	63	31	49	3	0	5	412	333
0	163.9	141	52	0	23	9	9	0	0	2	110.0	95
1	116.5	96	50	1	20	8	12	2	0	0	114.6	93
0	131.5	105	39	4	15	11	9	0	0	0	95.2	78
0	118.0	100	29	1	15	4	19	2	0	1	99.1	71
1	530	442	170	6	73	32	49	4	0	3	419	337
1	150.7	122	38	0	13	15	18	0	0	0	114.9	84
0	118.3	101	33	2	18	3	15	0	0	0	92.0	71
0	155.3	130	42	0	18	3	13	0	0	1	94.8	77
0	120.8	101	46	0	14	4	12	0	0	2	94.4	78
1	545	454	159	2	63	25	58	0	0	3	396	310
3	155.2	141	28	1	16	5	12	0	0	3	81.3	65
2	150.8	134	44	2	12	4	9	0	0	1	85.1	72
1	201.7	185	39	1	12	3	2	0	0	2	61.9	59
2	133.9	129	35	0	11	3	3	0	0	0	57.4	52
8	642	589	146	4	51	15	26	0	0	6	286	248
1	161.4	159	57	0	7	3	2	0	0	2	73.9	71
0	137.3	132	46	0	7	3	1	0	0	0	59.8	57
1	137.1	130	38	0	10	0	0	0	0	0	48.0	48
3	99.5	100	48	0	10	0	2	0	0	1	63.0	61
5	535	521	189	0	34	6	5	0	0	3	245	237
0	101.6	96	36	0	3	0	0	0	0	0	39.0	39
0	98.0	97	19	2	6	1	2	0	0	0	33.1	30
0	57.8	55	35	0	3	0	0	1	0	0	40.0	39
0	65.5	62	30	1	2	0	1	1	0	0	37.3	35
0	323	310	120	3	14	1	3	2	0	0	149	143
38	5970	5146	2078	44	647	294	410	23	5	46	4218	3547



Rainham - Manual Traffic and Queue Length Survey: Tuesday, 19 March 2024

Produced by Streetwise Services Ltd.

Junction: A - (North East) Ferry Lane / B - Onslip A13 / C - (South West) Ferry Lane / D - Offslip A13

Approach: D - Offslip A13

TIME	D to A										D to B										Car	Taxi	LGV	OGV1
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL				
07:00 - 07:15	18	0	7	0	1	0	0	0	27.3	26	0	0	0	0	0	0	0	0	0.0	0	11	0	2	0
07:15 - 07:30	16	0	11	3	0	0	0	1	31.9	31	0	0	0	0	0	0	0	0	0.0	0	18	0	3	2
07:30 - 07:45	15	0	7	2	1	0	0	0	27.3	25	0	0	0	0	0	0	0	0	0.0	0	12	0	3	5
07:45 - 08:00	29	0	10	9	2	0	0	2	57.9	52	0	0	0	0	0	0	0	0	0.0	0	16	0	3	0
Hourly Total	78	0	35	14	4	0	0	3	144	134	0	0	0	0	0	0	0	0	0	0	57	0	11	7
08:00 - 08:15	27	0	4	5	2	0	0	0	43.1	38	0	0	0	0	0	0	0	0	0.0	0	11	0	3	1
08:15 - 08:30	24	1	2	2	0	0	0	1	30.4	30	0	0	0	0	0	0	0	0	0.0	0	10	0	2	1
08:30 - 08:45	26	2	12	3	2	0	0	1	49.5	46	0	0	0	0	0	0	0	0	0.0	0	12	0	3	3
08:45 - 09:00	40	0	14	0	1	0	0	0	56.3	55	0	0	0	0	0	0	0	0	0.0	0	16	0	3	2
Hourly Total	117	3	32	10	5	0	0	2	179	169	0	0	0	0	0	0	0	0	0	0	49	0	11	7
09:00 - 09:15	35	0	6	3	2	0	0	0	50.1	46	0	0	1	0	0	0	0	0	1.0	1	10	0	2	1
09:15 - 09:30	23	0	12	4	4	0	0	0	50.2	43	0	0	0	0	0	0	0	0	0.0	0	9	0	3	0
09:30 - 09:45	24	0	7	3	1	0	0	1	38.2	36	0	0	0	0	0	0	0	0	0.0	0	12	0	4	1
09:45 - 10:00	26	1	9	6	3	1	0	0	53.9	46	0	0	0	0	0	0	0	0	0.0	0	11	0	8	1
Hourly Total	108	1	34	16	10	1	0	1	192	171	0	0	1	0	0	0	0	0	1	1	42	0	17	3
10:00 - 10:15	23	1	12	7	1	2	0	0	52.8	46	0	0	0	0	0	0	0	0	0.0	0	9	0	5	3
10:15 - 10:30	27	0	15	5	1	0	0	0	51.8	48	0	0	0	0	0	0	0	0	0.0	0	5	0	5	4
10:30 - 10:45	25	0	14	4	2	1	0	1	52.0	47	0	0	0	0	0	0	0	0	0.0	0	6	1	5	2
10:45 - 11:00	31	0	20	2	0	0	0	0	54.0	53	0	0	0	0	0	0	0	0	0.0	0	7	0	4	1
Hourly Total	106	1	61	18	4	3	0	1	211	194	0	0	0	0	0	0	0	0	0	0	27	1	19	10
11:00 - 11:15	39	1	13	3	3	0	0	0	64.4	59	3	0	0	0	0	0	0	0	3.0	3	6	0	2	0
11:15 - 11:30	30	1	12	6	2	3	0	0	62.6	54	1	0	0	0	1	0	0	0	3.3	2	7	0	3	1
11:30 - 11:45	37	0	6	11	3	2	0	1	70.8	60	1	0	1	0	1	0	0	0	4.3	3	12	0	6	3
11:45 - 12:00	35	1	14	3	3	0	0	0	61.4	56	0	0	0	0	0	0	0	0	0.0	0	8	0	4	2
Hourly Total	141	3	45	23	11	5	0	1	259	229	5	0	1	0	2	0	0	0	11	8	33	0	15	6
12:00 - 12:15	27	2	14	2	3	0	0	1	53.3	49	0	0	0	0	0	0	0	0	0.0	0	11	0	3	4
12:15 - 12:30	40	0	18	8	3	0	0	0	76.9	69	0	0	0	0	0	0	0	0	0.0	0	3	0	6	3
12:30 - 12:45	23	0	14	6	2	2	0	0	54.6	47	0	0	0	0	0	0	0	0	0.0	0	4	0	4	2
12:45 - 13:00	33	0	13	2	2	2	0	0	57.6	52	0	0	0	0	0	0	0	0	0.0	0	3	1	4	3
Hourly Total	123	2	59	18	10	4	0	1	242	217	0	0	0	0	0	0	0	0	0	0	21	1	17	12
13:00 - 13:15	39	0	11	4	2	1	0	1	63.0	58	0	0	0	0	0	0	0	0	0.0	0	5	0	2	5
13:15 - 13:30	35	0	15	8	1	0	0	0	64.3	59	0	0	0	1	0	0	0	0	1.5	1	4	0	5	0
13:30 - 13:45	41	1	23	6	2	1	0	1	81.0	75	3	0	0	0	0	0	0	0	3.0	3	11	0	5	1
13:45 - 14:00	41	2	18	6	2	0	0	0	74.6	69	1	0	0	0	0	0	0	0	1.0	1	6	0	3	6
Hourly Total	156	3	67	24	7	2	0	2	283	261	4	0	0	1	0	0	0	0	6	5	26	0	15	12
14:00 - 14:15	43	0	18	6	0	0	0	1	70.4	68	1	0	0	0	0	0	0	0	1.0	1	8	0	7	3
14:15 - 14:30	41	2	13	7	3	1	0	0	75.4	67	0	0	0	0	0	0	0	0	0.0	0	9	0	6	2
14:30 - 14:45	37	0	12	2	2	0	0	1	57.0	54	0	0	0	0	1	0	0	0	2.3	1	5	0	4	4
14:45 - 15:00	44	0	18	4	3	0	0	1	75.3	70	0	0	0	0	0	0	0	0	0.0	0	6	0	6	2
Hourly Total	165	2	61	19	8	1	0	3	278	259	1	0	0	0	1	0	0	0	3	2	28	0	23	11
15:00 - 15:15	41	1	14	8	2	0	0	0	72.6	66	2	0	0	0	0	0	0	0	2.0	2	3	0	4	6
15:15 - 15:30	35	0	18	4	3	0	0	0	65.9	60	0	0	0	0	1	0	0	0	2.3	1	4	0	6	2
15:30 - 15:45	46	0	13	2	1	0	0	0	64.3	62	1	0	0	0	1	0	0	0	3.3	2	4	0	0	0
15:45 - 16:00	46	0	17	9	2	0	0	0	81.1	74	0	0	0	0	0	0	0	0	0.0	0	8	0	1	2
Hourly Total	168	1	62	23	8	0	0	0	284	262	3	0	0	0	2	0	0	0	8	5	19	0	11	10
16:00 - 16:15	55	3	15	6	0	0	0	2	82.8	81	0	0	0	0	0	0	0	0	0.0	0	2	0	2	2
16:15 - 16:30	36	1	16	6	1	0	0	3	65.5	63	0	0	1	0	0	0	0	0	1.0	1	6	0	3	0
16:30 - 16:45	47	0	12	2	0	1	0	0	64.0	62	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0
16:45 - 17:00	49	1	11	1	3	0	0	0	69.4	65	1	0	0	0	0	0	0	0	1.0	1	4	0	0	2
Hourly Total	187	5	54	15	4	1	0	5	282	271	1	0	1	0	0	0	0	0	2	2	12	0	6	4
17:00 - 17:15	52	0	13	2	0	0	0	3	69.2	70	1	0	0	0	0	0	0	0	1.0	1	3	0	0	1
17:15 - 17:30	50	1	8	1	0	0	0	3	61.7	63	0	0	0	0	0	0	0	0	0.0	0	5	0	0	0
17:30 - 17:45	66	0	11	0	0	0	0	0	77.0	77	0	0	0	0	0	0	0	0	0.0	0	3	0	1	0
17:45 - 18:00	57	0	5	2	0	0	0	1	65.4	65	0	0	0	0	0	0	0	0	0.0	0	6	0	1	0
Hourly Total	225	1	37	5	0	0	0	7	273	275	1	0	0	0	0	0	0	0	1	1	17	0	2	1
18:00 - 18:15	49	0	7	0	0	0	0	0	56.0	56	0	0	0	0	0	0	0	0	0.0	0	3	0	0	0
18:15 - 18:30	43	0	9	1	0	1	0	2	56.3	56	0	0	0	0	0	0	0	0	0.0	0	4	0	0	1
18:30 - 18:45	39	0	5	1	0	2	0	1	49.9	48	0	0	0	0	0	0	0	0	0.0	0	3	0	0	0
18:45 - 19:00	29	1	7	0	0	1	0	2	39.8	40	0	0	0	0	0	0	0	0	0.0	0	1	0	0	0
Hourly Total	160	1	28	2	0	4	0	5	202	200	0	0	0	0	0	0	0	0	0	0	11	0	0	1
Session Total	1734	23	575	187	71	21	0	31	2830	2642	15	0	3	1	5	0	0	0	31	24	342	2	147	84

D to C						D to D									
OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
6	0	0	0	26.8	19	0	0	0	0	0	0	0	0	0.0	0
5	0	0	0	35.5	28	0	0	0	0	0	0	0	0	0.0	0
3	0	0	0	29.4	23	0	0	0	0	0	0	0	0	0.0	0
4	0	0	1	28.6	24	0	0	0	0	0	0	0	0	0.0	0
18	0	0	1	120	94	0	0	0	0	0	0	0	0	0	0
3	0	0	1	22.8	19	0	0	0	0	0	0	0	0	0.0	0
4	0	0	0	22.7	17	0	0	0	0	0	0	0	0	0.0	0
4	0	0	0	28.7	22	0	0	0	0	0	0	0	0	0.0	0
6	0	0	0	35.8	27	0	0	0	0	0	0	0	0	0.0	0
17	0	0	1	110	85	0	0	0	0	0	0	0	0	0	0
4	0	0	0	22.7	17	0	0	0	0	0	0	0	0	0.0	0
5	0	0	1	23.9	18	0	0	0	0	0	0	0	0	0.0	0
8	0	0	0	35.9	25	0	0	0	0	0	0	0	0	0.0	0
10	0	0	2	44.3	32	0	0	0	0	0	0	0	0	0.0	0
27	0	0	3	127	92	0	0	0	0	0	0	0	0	0	0
5	0	0	0	30.0	22	0	0	0	0	0	0	0	0	0.0	0
7	0	0	0	32.1	21	0	0	0	0	0	0	0	0	0.0	0
11	0	0	0	40.3	25	0	0	0	0	0	0	0	0	0.0	0
11	0	0	0	37.8	23	0	0	0	0	0	0	0	0	0.0	0
34	0	0	0	140	91	0	0	0	0	0	0	0	0	0	0
8	0	0	0	26.4	16	0	0	0	0	0	0	0	0	0.0	0
9	0	0	0	32.2	20	0	0	0	0	0	0	0	0	0.0	0
5	0	0	0	34.0	26	0	0	0	0	0	0	0	0	0.0	0
6	0	0	0	28.8	20	0	0	0	0	0	0	0	0	0.0	0
28	0	0	0	121	82	0	0	0	0	0	0	0	0	0	0
3	0	0	1	27.3	22	0	0	0	0	0	0	0	0	0.0	0
4	2	0	0	26.7	18	0	0	0	0	0	0	0	0	0.0	0
12	0	0	1	39.0	23	0	0	0	0	0	0	0	0	0.0	0
8	0	0	1	31.3	20	0	0	0	0	0	0	0	0	0.0	0
27	2	0	3	124	83	0	0	0	0	0	0	0	0	0	0
3	0	0	0	21.4	15	0	0	0	0	0	0	0	0	0.0	0
18	0	0	0	50.4	27	0	0	0	0	0	0	0	0	0.0	0
9	0	0	0	38.2	26	0	0	0	0	0	0	0	0	0.0	0
6	0	0	0	31.8	21	0	0	0	0	0	0	0	0	0.0	0
36	0	0	0	142	89	0	0	0	0	0	0	0	0	0	0
8	0	0	0	37.9	26	0	0	0	0	0	0	0	0	0.0	0
7	0	0	0	34.1	24	0	0	0	0	0	0	0	0	0.0	0
6	0	0	0	28.8	19	0	0	0	0	0	0	0	0	0.0	0
14	0	0	0	47.2	28	0	0	0	0	0	0	0	0	0.0	0
35	0	0	0	148	97	0	0	0	0	0	0	0	0	0	0
14	0	0	0	48.2	27	0	0	0	0	0	0	0	0	0.0	0
12	0	0	0	40.6	24	0	0	0	0	0	0	0	0	0.0	0
10	0	0	0	27.0	14	0	0	0	0	0	0	0	0	0.0	0
11	0	0	0	37.3	22	0	0	0	0	0	0	0	0	0.0	0
47	0	0	0	153	87	0	0	0	0	0	0	0	0	0	0
11	0	0	0	32.3	17	0	0	0	0	0	0	0	0	0.0	0
7	0	0	0	25.1	16	0	0	0	0	0	0	0	0	0.0	0
2	0	0	0	5.6	3	0	0	0	0	0	0	0	0	0.0	0
3	0	0	0	13.9	9	0	0	0	0	0	0	0	0	0.0	0
23	0	0	0	77	45	0	0	0	0	0	0	0	0	0	0
2	0	0	0	9.1	6	0	0	0	0	0	0	0	0	0.0	0
1	0	0	0	7.3	6	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	4.0	4	0	0	0	0	0	0	0	0	0.0	0
2	0	0	0	11.6	9	0	0	0	0	0	0	0	0	0.0	0
5	0	0	0	32	25	0	0	0	0	0	0	0	0	0	0
0	0	0	0	3.0	3	0	0	0	0	0	0	0	0	0.0	0
2	0	0	0	10.1	7	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	3.0	3	0	0	0	0	0	0	0	0	0.0	0
1	0	0	0	3.3	2	0	0	0	0	0	0	0	0	0.0	0
3	0	0	0	19	15	0	0	0	0	0	0	0	0	0	0
300	2	0	8	1314	885	0	0	0	0	0	0	0	0	0	0

TIME	From D						
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE
07:00 - 07:15	29	0	9	0	7	0	0
07:15 - 07:30	34	0	14	5	5	0	0
07:30 - 07:45	27	0	10	7	4	0	0
07:45 - 08:00	45	0	13	9	6	0	0
Hourly Total	135	0	46	21	22	0	0
08:00 - 08:15	38	0	7	6	5	0	0
08:15 - 08:30	34	1	4	3	4	0	0
08:30 - 08:45	38	2	15	6	6	0	0
08:45 - 09:00	56	0	17	2	7	0	0
Hourly Total	166	3	43	17	22	0	0
09:00 - 09:15	45	0	9	4	6	0	0
09:15 - 09:30	32	0	15	4	9	0	0
09:30 - 09:45	36	0	11	4	9	0	0
09:45 - 10:00	37	1	17	7	13	1	0
Hourly Total	150	1	52	19	37	1	0
10:00 - 10:15	32	1	17	10	6	2	0
10:15 - 10:30	32	0	20	9	8	0	0
10:30 - 10:45	31	1	19	6	13	1	0
10:45 - 11:00	38	0	24	3	11	0	0
Hourly Total	133	2	80	28	38	3	0
11:00 - 11:15	48	1	15	3	11	0	0
11:15 - 11:30	38	1	15	7	12	3	0
11:30 - 11:45	50	0	13	14	9	2	0
11:45 - 12:00	43	1	18	5	9	0	0
Hourly Total	179	3	61	29	41	5	0
12:00 - 12:15	38	2	17	6	6	0	0
12:15 - 12:30	43	0	24	11	7	2	0
12:30 - 12:45	27	0	18	8	14	2	0
12:45 - 13:00	36	1	17	5	10	2	0
Hourly Total	144	3	76	30	37	6	0
13:00 - 13:15	44	0	13	9	5	1	0
13:15 - 13:30	39	0	20	9	19	0	0
13:30 - 13:45	55	1	28	7	11	1	0
13:45 - 14:00	48	2	21	12	8	0	0
Hourly Total	186	3	82	37	43	2	0
14:00 - 14:15	52	0	25	9	8	0	0
14:15 - 14:30	50	2	19	9	10	1	0
14:30 - 14:45	42	0	16	6	9	0	0
14:45 - 15:00	50	0	24	6	17	0	0
Hourly Total	194	2	84	30	44	1	0
15:00 - 15:15	46	1	18	14	16	0	0
15:15 - 15:30	39	0	24	6	16	0	0
15:30 - 15:45	51	0	13	2	12	0	0
15:45 - 16:00	54	0	18	11	13	0	0
Hourly Total	190	1	73	33	57	0	0
16:00 - 16:15	57	3	17	8	11	0	0
16:15 - 16:30	42	1	20	6	8	0	0
16:30 - 16:45	47	0	13	2	2	1	0
16:45 - 17:00	54	1	11	3	6	0	0
Hourly Total	200	5	61	19	27	1	0
17:00 - 17:15	56	0	13	3	2	0	0
17:15 - 17:30	55	1	8	1	1	0	0
17:30 - 17:45	69	0	12	0	0	0	0
17:45 - 18:00	63	0	6	2	2	0	0
Hourly Total	243	1	39	6	5	0	0
18:00 - 18:15	52	0	7	0	0	0	0
18:15 - 18:30	47	0	9	2	2	1	0
18:30 - 18:45	42	0	5	1	0	2	0
18:45 - 19:00	30	1	7	0	1	1	0
Hourly Total	171	1	28	3	3	4	0
Session Total	2091	25	725	272	376	23	0

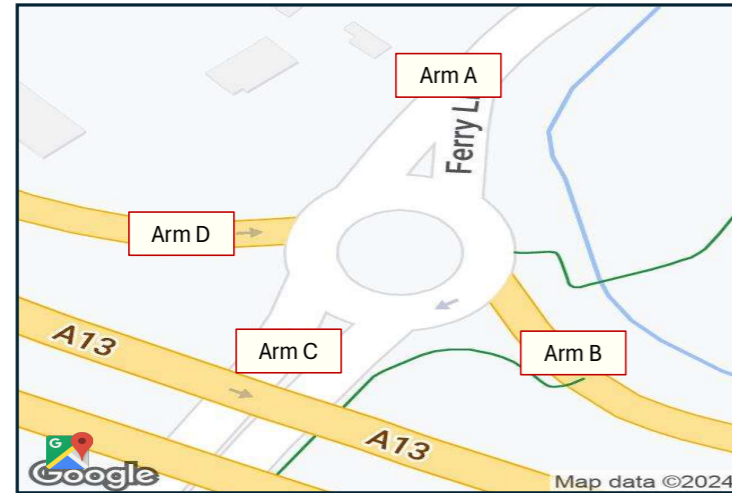




**Rainham - Manual Traffic and Queue Length Survey: Tuesday, 19 March 2024**

Produced by Streetwise Services Ltd.

**Junction: A - (North East) Ferry Lane / B - Onslip A13 / C - (South West) Ferry Lane / D - Offslip A13**



Matrix Totals:

Show single Session:

Custom Start / End:

Show Peak Times:

Arm Destination

		A	B	C	D	Total	% Total
Arm Origin	A	10	2441	2644	0	5095	100.00%
	B	0	0	0	0	0	0.00%
	C	3866	1262	18	0	5146	100.00%
	D	2642	24	885	0	3551	100.00%
	Total	6518	3727	3547	0		
% Total		100.00%	100.00%	100.00%	0.00%		

Classification	Include
Car	Yes
Taxi	Yes
LGV	Yes
OGV1	Yes
OGV2	Yes
BUS	Yes
P/CYCLE	Yes
M/CYCLE	Yes



**Rainham: Queue Length Survey - Tuesday, 19 March 2024**

Produced by Streetwise Services Ltd.

Junction: **A - (North East) Ferry Lane / B - Onslip A13 / C - (South West) Ferry Lane / D - Offslip A13**

Survey Period	A - (North East) Ferry Lane		C - (South West) Ferry Lane		D - Offslip A13	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
	MAX	MAX	MAX	MAX	MAX	MAX
07:00 - 07:05	0	0	0	0	2	2
07:05 - 07:10	1	0	0	0	2	4
07:10 - 07:15	0	0	0	0	1	1
07:15 - 07:20	1	1	0	0	2	1
07:20 - 07:25	5	0	0	0	2	2
07:25 - 07:30	1	0	0	0	1	2
07:30 - 07:35	1	2	0	0	3	2
07:35 - 07:40	0	0	0	0	1	3
07:40 - 07:45	6	0	0	0	2	2
07:45 - 07:50	0	1	0	0	3	1
07:50 - 07:55	2	1	0	0	3	5
07:55 - 08:00	1	2	0	0	3	0
08:00 - 08:05	0	0	0	0	2	0
08:05 - 08:10	4	1	0	0	1	1
08:10 - 08:15	2	0	0	0	2	4
08:15 - 08:20	1	0	0	0	0	1
08:20 - 08:25	0	1	0	0	1	0
08:25 - 08:30	8	0	0	0	1	3
08:30 - 08:35	3	1	0	0	2	2
08:35 - 08:40	1	0	0	0	1	0
08:40 - 08:45	2	1	0	0	3	0
08:45 - 08:50	0	0	0	0	1	1
08:50 - 08:55	3	0	0	0	2	2
08:55 - 09:00	0	0	0	0	1	1
09:00 - 09:05	1	1	0	0	3	2
09:05 - 09:10	2	0	0	0	0	2
09:10 - 09:15	1	0	0	0	2	1
09:15 - 09:20	3	0	0	0	1	3
09:20 - 09:25	2	0	0	0	1	1
09:25 - 09:30	0	0	1	0	6	0
09:30 - 09:35	2	1	0	0	0	2
09:35 - 09:40	8	0	0	0	1	2
09:40 - 09:45	3	0	0	0	2	4
09:45 - 09:50	3	0	0	0	1	1
09:50 - 09:55	0	0	0	0	1	0
09:55 - 10:00	1	1	0	0	3	1
15:00 - 15:05	11	0	0	0	3	6
15:05 - 15:10	9	1	0	0	4	3
15:10 - 15:15	1	2	1	0	2	2
15:15 - 15:20	1	0	1	0	1	0
15:20 - 15:25	0	1	0	0	1	0
15:25 - 15:30	2	1	0	0	4	2
15:30 - 15:35	1	0	0	0	2	2
15:35 - 15:40	0	0	0	0	3	2
15:40 - 15:45	1	1	0	0	4	3
15:45 - 15:50	1	2	0	0	4	2
15:50 - 15:55	2	0	0	0	2	4
15:55 - 16:00	2	1	0	0	1	0
16:00 - 16:05	2	2	0	0	2	2
16:05 - 16:10	3	1	0	0	6	2
16:10 - 16:15	2	0	0	0	1	2
16:15 - 16:20	5	1	0	0	2	1
16:20 - 16:25	8	1	0	0	3	0
16:25 - 16:30	2	0	0	0	2	0
16:30 - 16:35	4	0	0	0	3	0
16:35 - 16:40	5	1	0	0	3	0
16:40 - 16:45	2	0	0	0	5	1
16:45 - 16:50	1	1	0	0	0	0
16:50 - 16:55	1	1	0	0	1	1
16:55 - 17:00	3	1	0	0	3	2
17:00 - 17:05	1	1	0	0	2	2
17:05 - 17:10	6	3	0	0	4	2
17:10 - 17:15	2	0	0	0	2	2
17:15 - 17:20	0	1	0	0	1	1
17:20 - 17:25	0	0	0	0	4	0
17:25 - 17:30	0	2	0	0	1	0
17:30 - 17:35	1	0	0	0	4	0
17:35 - 17:40	1	0	0	0	5	1
17:40 - 17:45	2	0	0	0	4	1
17:45 - 17:50	1	1	0	0	4	0
17:50 - 17:55	1	0	0	0	1	1
17:55 - 18:00	0	0	0	0	1	1





***Rainham: Queue Length Survey - Tuesday, 19 March 2024***

Produced by Streetwise Services Ltd.

**Junction: A - (North East) Ferry Lane / B - Offslip A13 / C - (South West) Ferry Lane / D - Onslip A13**

CLASSIFICATION	PCU
Car	1.0
Taxi	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0
P/CYCLE	0.2
M/CYCLE	0.4



**Rainham - Manual Traffic and Queue Length Survey: Tuesday, 19 March 2024**

Produced by Streetwise Services Ltd.

**Junction:** A - (North East) Ferry Lane / B - Offslip A13 / C - (South West) Ferry Lane / D - Onslip A13

**Approach:** A - (North East) Ferry Lane

TIME	A to B										A to C										Car	Taxi	LGV	OGV1
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL				
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	22	0	3	0	7	0	1	0	41.3	33	12	0	7	4
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	33	0	5	1	6	0	0	0	53.3	45	32	0	10	1
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	29	0	5	5	3	0	1	2	49.4	45	24	0	5	4
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	46	0	4	1	4	0	0	2	61.5	57	27	0	2	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>130</b>	<b>0</b>	<b>17</b>	<b>7</b>	<b>20</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>206</b>	<b>180</b>	<b>95</b>	<b>0</b>	<b>24</b>	<b>9</b>
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	29	0	7	2	4	0	0	1	48.6	43	21	0	6	6
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	25	0	7	4	4	0	2	0	47.6	42	14	1	7	4
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	23	0	4	2	4	0	0	0	39.2	33	23	0	9	4
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	31	0	5	4	6	0	0	0	55.8	46	20	0	4	6
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>23</b>	<b>12</b>	<b>18</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>191</b>	<b>164</b>	<b>78</b>	<b>1</b>	<b>26</b>	<b>20</b>
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	21	0	6	3	4	0	0	0	40.7	34	23	1	10	4
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	16	0	4	1	5	0	0	1	33.4	27	20	0	11	4
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	25	0	6	4	8	0	0	0	55.4	43	26	0	6	6
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	14	0	11	3	10	0	0	1	52.9	39	28	0	4	5
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>76</b>	<b>0</b>	<b>27</b>	<b>11</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>182</b>	<b>143</b>	<b>97</b>	<b>1</b>	<b>31</b>	<b>19</b>
10:00 - 10:15	0	0	0	0	0	0	0	0	0.0	0	14	0	6	6	6	0	0	0	42.8	32	40	0	5	7
10:15 - 10:30	0	0	0	0	0	0	0	0	0.0	0	6	0	5	5	8	0	0	1	37.3	25	36	0	11	9
10:30 - 10:45	0	0	0	0	0	0	0	0	0.0	0	13	1	10	2	11	0	1	0	52.5	38	36	5	11	5
10:45 - 11:00	0	0	0	0	0	0	0	0	0.0	0	21	0	7	2	13	0	0	0	60.9	43	24	2	6	5
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>54</b>	<b>1</b>	<b>28</b>	<b>15</b>	<b>38</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>194</b>	<b>138</b>	<b>136</b>	<b>7</b>	<b>33</b>	<b>26</b>
11:00 - 11:15	0	0	0	0	0	0	0	0	0.0	0	12	0	4	3	7	0	0	2	37.4	28	22	3	7	3
11:15 - 11:30	0	0	0	0	0	0	0	0	0.0	0	15	0	4	2	9	0	0	0	42.7	30	22	1	13	3
11:30 - 11:45	0	0	0	0	0	0	0	0	0.0	0	15	0	7	4	4	0	0	0	37.2	30	35	1	8	3
11:45 - 12:00	0	0	0	0	0	0	0	0	0.0	0	9	0	5	4	6	0	0	0	33.8	24	35	4	15	5
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>0</b>	<b>20</b>	<b>13</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>151</b>	<b>112</b>	<b>114</b>	<b>9</b>	<b>43</b>	<b>14</b>
12:00 - 12:15	0	0	0	0	0	0	0	0	0.0	0	17	0	6	4	3	0	0	0	35.9	30	27	2	15	6
12:15 - 12:30	0	0	0	0	0	0	0	0	0.0	0	17	0	13	3	5	0	0	0	46.0	38	27	1	9	4
12:30 - 12:45	0	0	0	0	0	0	0	0	0.0	0	15	0	8	2	11	0	0	1	51.7	37	27	1	7	7
12:45 - 13:00	0	0	0	0	0	0	0	0	0.0	0	10	0	7	4	9	0	1	0	43.9	31	34	0	10	6
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>59</b>	<b>0</b>	<b>34</b>	<b>13</b>	<b>28</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>178</b>	<b>136</b>	<b>115</b>	<b>4</b>	<b>41</b>	<b>23</b>
13:00 - 13:15	0	0	0	0	0	0	0	0	0.0	0	18	0	5	5	4	0	0	2	40.5	34	29	1	15	6
13:15 - 13:30	0	0	0	0	0	0	0	0	0.0	0	13	0	8	0	15	0	0	0	55.5	36	31	2	11	4
13:30 - 13:45	0	0	0	0	0	0	0	0	0.0	0	18	0	7	3	8	0	0	1	48.3	37	28	3	9	4
13:45 - 14:00	0	0	0	0	0	0	0	0	0.0	0	10	0	4	6	7	0	0	0	39.1	27	27	0	4	2
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>59</b>	<b>0</b>	<b>24</b>	<b>14</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>183</b>	<b>134</b>	<b>115</b>	<b>6</b>	<b>39</b>	<b>16</b>
14:00 - 14:15	0	0	0	0	0	0	0	0	0.0	0	12	0	12	4	9	0	0	0	50.7	37	37	0	10	7
14:15 - 14:30	0	0	0	0	0	0	0	0	0.0	0	20	0	8	3	9	0	0	0	53.2	40	34	1	13	5
14:30 - 14:45	0	0	0	0	0	0	0	0	0.0	0	8	0	7	8	7	0	0	0	43.1	30	31	4	7	3
14:45 - 15:00	0	0	0	0	0	0	0	0	0.0	0	10	0	7	2	17	1	0	0	61.1	37	18	1	9	2
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>0</b>	<b>34</b>	<b>17</b>	<b>42</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>208</b>	<b>144</b>	<b>120</b>	<b>6</b>	<b>39</b>	<b>17</b>
15:00 - 15:15	0	0	0	0	0	0	0	0	0.0	0	12	0	5	8	15	0	0	0	63.5	40	27	0	8	6
15:15 - 15:30	0	0	0	0	0	0	0	0	0.0	0	8	0	11	4	14	0	0	0	57.2	37	24	1	7	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0.0	0	10	0	5	0	12	0	0	0	42.6	27	31	1	13	3
15:45 - 16:00	0	0	0	0	0	0	0	0	0.0	0	13	0	2	2	12	0	0	0	45.6	29	35	0	12	2
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>0</b>	<b>23</b>	<b>14</b>	<b>53</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>209</b>	<b>133</b>	<b>117</b>	<b>2</b>	<b>40</b>	<b>11</b>
16:00 - 16:15	0	0	0	0	0	0	0	0	0.0	0	3	0	4	1	12	0	0	0	36.1	20	24	1	12	3
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	10	0	4	2	8	0	0	0	35.4	24	34	2	8	3
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	5	0	1	2	2	0	0	0	13.6	10	33	0	10	1
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	10	0	3	2	3	0	0	0	22.9	18	25	0	9	1
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>12</b>	<b>7</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>108</b>	<b>72</b>	<b>116</b>	<b>3</b>	<b>39</b>	<b>8</b>
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	9	0	2	2	2	0	0	0	18.6	15	48	0	5	1
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	7	0	1	2	1	0	0	0	13.3	11	39	0	6	1
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	7	0	2	0	0	0	0	0	9.0	9	30	0	7	0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	10	0	3	0	2	0	0	0	17.6	15	37	0	5	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>0</b>	<b>8</b>	<b>4</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>59</b>	<b>50</b>	<b>154</b>	<b>0</b>	<b>23</b>	<b>2</b>
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	7	0	0	0	0	0	0	0	7.0	7	30	0	4	0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	4	0	2	0	2	0	1	0	10.8	9	15	2	4	1
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	7	0	1	0	0	0	0	0	8.0	8	28	0	2	0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	3	0	1	0	1	0	0	0	6.3	5	28	1	1	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>32</b>	<b>29</b>	<b>101</b>	<b>3</b>	<b>11</b>	<b>1</b>
<b>Session Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>712</b>	<b>1</b>	<b>254</b>	<b>127</b>	<b>319</b>	<b>1</b>	<b>7</b>	<b>14</b>	<b>1900</b>	<b>1435</b>	<b>1358</b>			

A to D						A to A									
OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
2	2	0	2	34.4	29	0	0	0	0	0	0	0	0	0.0	0
4	0	0	1	53.1	48	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	35.0	33	0	0	0	1	0	0	0	0	1.5	1
2	0	0	0	33.6	31	0	0	0	0	0	0	0	0	0.0	0
8	2	0	3	156	141	0	0	0	1	0	0	0	0	2	1
1	0	0	1	38.7	35	0	0	1	0	0	0	0	0	1.0	1
2	1	0	2	35.4	31	0	0	0	0	0	0	0	0	0.0	0
1	0	0	1	40.7	38	0	0	0	0	0	0	0	0	0.0	0
1	0	0	0	35.3	31	0	0	0	0	0	0	0	0	0.0	0
5	1	0	4	150	135	0	0	1	0	0	0	0	0	1	1
2	0	0	0	44.6	40	0	0	0	0	0	0	0	0	0.0	0
3	0	0	0	43.9	38	1	0	0	0	0	0	0	0	1.0	1
4	1	0	1	52.6	44	0	0	0	0	0	0	0	0	0.0	0
1	0	0	3	43.0	41	0	0	0	0	0	0	0	1	0.4	1
10	1	0	4	184	163	1	0	0	0	0	0	0	1	1	2
5	0	0	0	67.0	57	0	0	0	0	0	0	0	0	0.0	0
5	0	0	0	72.0	61	0	0	0	0	0	0	0	0	0.0	0
2	0	0	0	64.1	59	0	0	0	0	0	0	0	0	0.0	0
3	0	0	0	46.4	40	0	0	0	0	0	0	0	0	0.0	0
15	0	0	0	250	217	0	0	0	0	0	0	0	0	0	0
0	0	0	0	36.5	35	0	0	0	0	1	0	0	0	2.3	1
4	2	0	0	53.7	45	1	0	0	0	0	0	0	0	1.0	1
2	2	0	0	57.1	51	0	0	0	0	0	0	0	0	0.0	0
3	1	0	1	70.8	64	2	0	0	0	0	0	0	0	2.0	2
9	5	0	1	218	195	3	0	0	0	1	0	0	0	5	4
6	0	0	1	67.2	57	0	0	0	0	0	0	0	0	0.0	0
3	3	0	0	55.9	47	0	0	1	0	0	0	0	0	1.0	1
3	1	0	0	54.4	46	1	0	0	0	0	0	0	0	1.0	1
2	1	0	1	60.0	54	0	0	0	0	0	0	0	0	0.0	0
14	5	0	2	238	204	1	0	1	0	0	0	0	0	2	2
5	2	0	0	69.5	58	0	0	0	0	0	0	0	0	0.0	0
6	0	0	1	64.2	55	0	0	0	0	0	0	0	0	0.0	0
2	1	0	1	53.0	48	0	0	0	0	0	0	0	0	0.0	0
2	0	0	0	38.6	35	1	0	0	0	1	0	0	0	3.3	2
15	3	0	2	225	196	1	0	0	0	1	0	0	0	3	2
0	0	0	2	58.3	56	0	0	0	0	0	0	0	0	0.0	0
3	2	0	0	66.4	58	0	0	0	0	0	0	0	0	0.0	0
1	0	0	0	48.8	46	0	0	0	0	1	0	0	0	2.3	1
2	1	0	0	37.6	33	0	0	0	0	0	0	0	0	0.0	0
6	3	0	2	211	193	0	0	0	0	1	0	0	0	2	1
3	0	0	1	51.3	45	0	0	0	0	0	0	0	0	0.0	0
1	0	0	0	34.3	33	0	0	0	0	0	0	0	0	0.0	0
0	0	0	1	49.9	49	0	0	0	0	1	0	0	0	2.3	1
0	0	0	2	50.8	51	0	0	0	0	0	0	0	0	0.0	0
4	0	0	4	186	178	0	0	0	0	1	0	0	0	2	1
0	0	0	3	42.7	43	1	0	0	0	0	0	0	0	1.0	1
1	0	0	1	51.2	49	0	0	0	0	0	0	0	0	0.0	0
0	0	0	1	44.9	45	0	0	0	0	0	0	0	0	0.0	0
0	0	0	1	35.9	36	0	0	0	0	0	0	0	0	0.0	0
1	0	0	6	175	173	1	0	0	0	0	0	0	0	1	1
0	0	0	2	55.3	56	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	46.5	46	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	37.0	37	0	0	1	0	0	0	0	0	1.0	1
0	0	0	1	42.4	43	1	0	0	0	0	0	0	0	1.0	1
0	0	0	3	181	182	1	0	1	0	0	0	0	0	2	2
0	0	0	0	34.0	34	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	22.5	22	0	0	0	0	0	0	0	0	0.0	0
0	1	0	0	32.0	31	0	0	0	0	0	0	0	0	0.0	0
0	1	0	0	32.0	31	0	0	0	0	0	0	0	0	0.0	0
0	2	0	0	121	118	0	0	0	0	0	0	0	0	0	0
87	22	0	31	2295	2095	8	0	3	1	4	0	0	1	22	17

TIME	From A						
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE
07:00 - 07:15	34	0	10	4	9	2	1
07:15 - 07:30	65	0	15	2	10	0	0
07:30 - 07:45	53	0	10	10	3	0	1
07:45 - 08:00	73	0	6	1	6	0	0
Hourly Total	225	0	41	17	28	2	2
08:00 - 08:15	50	0	14	8	5	0	0
08:15 - 08:30	39	1	14	8	6	1	2
08:30 - 08:45	46	0	13	6	5	0	0
08:45 - 09:00	51	0	9	10	7	0	0
Hourly Total	186	1	50	32	23	1	2
09:00 - 09:15	44	1	16	7	6	0	0
09:15 - 09:30	37	0	15	5	8	0	0
09:30 - 09:45	51	0	12	10	12	1	0
09:45 - 10:00	42	0	15	8	11	0	0
Hourly Total	174	1	58	30	37	1	0
10:00 - 10:15	54	0	11	13	11	0	0
10:15 - 10:30	42	0	16	14	13	0	0
10:30 - 10:45	49	6	21	7	13	0	1
10:45 - 11:00	45	2	13	7	16	0	0
Hourly Total	190	8	61	41	53	0	1
11:00 - 11:15	34	3	11	6	8	0	0
11:15 - 11:30	38	1	17	5	13	2	0
11:30 - 11:45	50	1	15	7	6	2	0
11:45 - 12:00	46	4	20	9	9	1	0
Hourly Total	168	9	63	27	36	5	0
12:00 - 12:15	44	2	21	10	9	0	0
12:15 - 12:30	44	1	23	7	8	3	0
12:30 - 12:45	43	1	15	9	14	1	0
12:45 - 13:00	44	0	17	10	11	1	1
Hourly Total	175	4	76	36	42	5	1
13:00 - 13:15	47	1	20	11	9	2	0
13:15 - 13:30	44	2	19	4	21	0	0
13:30 - 13:45	46	3	16	7	10	1	0
13:45 - 14:00	38	0	8	8	10	0	0
Hourly Total	175	6	63	30	50	3	0
14:00 - 14:15	49	0	22	11	9	0	0
14:15 - 14:30	54	1	21	8	12	2	0
14:30 - 14:45	39	4	14	11	9	0	0
14:45 - 15:00	28	1	16	4	19	2	0
Hourly Total	170	6	73	34	49	4	0
15:00 - 15:15	39	0	13	14	18	0	0
15:15 - 15:30	32	1	18	4	15	0	0
15:30 - 15:45	41	1	18	3	13	0	0
15:45 - 16:00	48	0	14	4	12	0	0
Hourly Total	160	2	63	25	58	0	0
16:00 - 16:15	28	1	16	4	12	0	0
16:15 - 16:30	44	2	12	5	9	0	0
16:30 - 16:45	38	0	11	3	2	0	0
16:45 - 17:00	35	0	12	3	3	0	0
Hourly Total	145	3	51	15	26	0	0
17:00 - 17:15	57	0	7	3	2	0	0
17:15 - 17:30	46	0	7	3	1	0	0
17:30 - 17:45	37	0	10	0	0	0	0
17:45 - 18:00	48	0	8	0	2	0	0
Hourly Total	188	0	32	6	5	0	0
18:00 - 18:15	37	0	4	0	0	0	0
18:15 - 18:30	19	2	6	1	2	0	1
18:30 - 18:45	35	0	3	0	0	1	0
18:45 - 19:00	31	1	2	0	1	1	0
Hourly Total	122	3	15	1	3	2	1
Session Total	2078	43	646	294	410	23	7

			To A									
M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
2	75.7	62	107	1	37	4	12	5	0	1	189.0	167
1	106.4	93	116	1	42	8	21	0	0	2	220.1	190
2	85.9	79	126	1	47	11	14	0	0	0	222.7	199
2	95.1	88	80	0	40	10	13	0	0	1	165.3	144
7	363	322	429	3	166	33	60	5	0	4	797	700
2	88.3	79	73	0	27	9	10	0	0	0	136.5	119
2	83.0	73	64	1	26	6	11	0	0	1	125.7	109
1	79.9	71	53	0	17	9	13	0	0	0	113.4	92
0	91.1	77	54	0	19	6	8	0	0	1	100.8	88
5	342	300	244	1	89	30	42	0	0	2	476	408
0	85.3	74	48	0	18	11	17	0	0	0	121.6	94
1	78.3	66	47	1	12	3	15	0	0	0	99.0	78
1	108.0	87	53	0	18	10	11	0	0	2	112.1	94
5	96.3	81	24	1	16	9	7	1	0	1	73.0	59
7	368	308	172	2	64	33	50	1	0	3	406	325
0	109.8	89	31	1	23	7	15	0	0	0	100.0	77
1	109.3	86	33	1	20	12	14	0	0	0	104.2	80
0	116.6	97	35	0	25	3	15	0	0	3	100.2	81
0	107.3	83	50	0	18	6	19	0	0	2	121.5	95
1	443	355	149	2	86	28	63	0	0	5	426	333
2	76.2	64	38	0	19	9	12	0	0	1	98.5	79
0	97.4	76	55	0	14	4	10	0	0	2	98.8	85
0	94.3	81	38	0	26	4	14	0	0	1	102.6	83
1	106.6	90	49	1	26	10	9	0	0	0	111.7	95
3	375	311	180	1	85	27	45	0	0	4	412	342
1	103.1	87	51	0	20	9	9	1	0	1	107.6	91
0	102.9	86	53	1	18	11	10	0	0	2	112.3	95
1	107.1	84	50	0	16	5	12	0	0	0	101.1	83
1	103.9	85	46	0	15	9	12	0	0	0	102.1	82
3	417	342	200	1	69	34	43	1	0	3	423	351
2	110.0	92	44	1	18	9	15	0	0	0	111.0	87
1	119.7	91	49	0	20	8	8	0	0	1	99.8	86
2	101.3	85	52	1	18	13	11	1	0	1	118.2	97
0	81.0	64	51	0	21	8	17	0	0	0	123.1	97
5	412	332	196	2	77	38	51	1	0	2	452	367
2	109.0	93	91	0	23	13	13	0	0	0	163.4	140
0	119.6	98	51	0	23	10	12	0	0	1	117.0	97
0	94.2	77	57	0	18	12	16	1	0	0	131.8	104
0	98.7	70	55	0	27	10	9	0	0	0	117.7	101
2	422	338	254	0	91	45	50	1	0	1	530	442
1	114.8	85	60	2	25	13	15	2	0	1	145.4	118
0	91.5	70	58	2	25	7	11	0	0	0	120.8	103
1	94.8	77	83	0	22	6	17	1	0	0	155.1	129
2	96.4	80	59	0	19	10	11	0	1	0	118.5	100
4	398	312	260	4	91	36	54	3	1	1	540	450
3	79.8	64	100	0	24	5	11	0	1	3	158.2	144
1	86.6	73	90	0	19	10	10	0	0	2	147.8	131
1	58.5	55	138	0	31	6	11	0	0	1	203.7	187
1	58.8	54	99	0	18	8	2	0	0	2	134.4	129
6	284	246	427	0	92	29	34	0	1	8	644	591
2	73.9	71	130	0	19	2	4	0	4	1	162.4	160
0	59.8	57	102	0	21	6	2	0	1	0	136.8	132
0	47.0	47	104	0	14	6	4	0	0	1	136.6	129
1	61.0	59	80	0	17	0	1	0	0	3	100.5	101
3	242	234	416	0	71	14	11	0	5	5	536	522
0	41.0	41	72	0	15	6	2	0	0	0	100.6	95
0	33.3	31	87	0	9	0	0	1	0	0	98.0	97
0	40.0	39	39	0	13	1	1	1	0	0	57.8	55
0	38.3	36	49	0	6	5	0	1	0	0	64.5	61
0	153	147	247	0	43	12	3	3	0	0	321	308
46	4217	3547	3174	16	1024	359	506	15	7	38	5963	5139



Rainham - Manual Traffic and Queue Length Survey: Tuesday, 19 March 2024

Produced by Streetwise Services Ltd.

Junction: A - (North East) Ferry Lane / B - Offslip A13 / C - (South West) Ferry Lane / D - Onslip A13

Approach: B - Offslip A13

TIME	B to C										B to D										Car	Taxi	LGV	OGV1
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL				
07:00 - 07:15	28	0	9	2	3	0	0	0	46.9	42	53	0	31	3	14	0	0	0	120.7	101	96	1	34	3
07:15 - 07:30	22	0	8	4	5	0	0	0	47.5	39	115	0	37	5	7	0	0	0	175.6	164	113	1	35	4
07:30 - 07:45	21	0	7	3	9	0	0	0	53.2	40	162	0	47	4	7	0	0	0	231.1	220	121	1	41	6
07:45 - 08:00	43	0	3	0	3	0	0	0	52.9	49	82	0	28	4	1	0	0	0	118.3	115	72	0	36	4
<b>Hourly Total</b>	<b>114</b>	<b>0</b>	<b>27</b>	<b>9</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>201</b>	<b>170</b>	<b>412</b>	<b>0</b>	<b>143</b>	<b>16</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>646</b>	<b>600</b>	<b>402</b>	<b>3</b>	<b>146</b>	<b>17</b>
08:00 - 08:15	41	0	6	1	7	0	0	0	64.6	55	14	0	1	0	4	0	0	0	24.2	19	68	0	21	7
08:15 - 08:30	27	0	3	3	7	0	1	0	50.8	41	0	0	0	0	1	0	0	1	2.7	2	62	1	18	5
08:30 - 08:45	26	0	2	6	11	0	0	0	62.3	45	0	0	0	1	2	0	0	0	6.1	3	48	0	13	6
08:45 - 09:00	28	0	3	1	11	0	0	0	57.8	43	1	0	0	0	0	0	0	0	1.0	1	45	0	12	4
<b>Hourly Total</b>	<b>122</b>	<b>0</b>	<b>14</b>	<b>11</b>	<b>36</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>236</b>	<b>184</b>	<b>15</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>34</b>	<b>25</b>	<b>223</b>	<b>1</b>	<b>64</b>	<b>22</b>
09:00 - 09:15	18	0	1	0	9	0	0	0	39.7	28	0	0	0	1	0	0	0	0	1.5	1	39	0	15	6
09:15 - 09:30	14	1	2	4	4	0	0	0	32.2	25	1	0	0	1	0	0	0	0	2.5	2	30	1	9	2
09:30 - 09:45	11	0	3	5	11	0	0	0	46.8	30	0	0	0	0	3	0	0	0	6.9	3	42	0	10	7
09:45 - 10:00	13	0	9	3	7	0	0	0	42.6	32	0	0	0	1	0	0	0	0	1.5	1	18	1	10	4
<b>Hourly Total</b>	<b>56</b>	<b>1</b>	<b>15</b>	<b>12</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>161</b>	<b>115</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>7</b>	<b>129</b>	<b>2</b>	<b>44</b>	<b>19</b>
10:00 - 10:15	6	0	5	4	11	0	0	0	42.3	26	1	0	2	0	0	0	0	0	3.0	3	23	1	14	3
10:15 - 10:30	11	0	6	1	14	0	0	0	50.7	32	2	0	1	0	0	0	0	0	3.0	3	22	1	11	9
10:30 - 10:45	8	0	7	3	8	0	0	0	37.9	26	0	0	0	0	1	0	0	0	2.3	1	23	0	11	2
10:45 - 11:00	8	0	6	1	3	0	0	0	22.4	18	3	0	0	0	0	0	0	0	3.0	3	42	0	10	2
<b>Hourly Total</b>	<b>33</b>	<b>0</b>	<b>24</b>	<b>9</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>153</b>	<b>102</b>	<b>6</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>10</b>	<b>110</b>	<b>2</b>	<b>46</b>	<b>16</b>
11:00 - 11:15	6	0	9	3	8	0	0	0	37.9	26	0	0	0	0	1	0	0	0	2.3	1	26	0	13	5
11:15 - 11:30	6	0	4	1	9	0	0	0	32.2	20	0	0	0	1	1	0	0	0	3.8	2	39	0	9	4
11:30 - 11:45	9	0	6	2	5	0	0	0	29.5	22	0	0	0	2	2	0	0	0	7.6	4	31	0	18	2
11:45 - 12:00	3	0	3	2	8	0	0	0	27.4	16	1	0	0	0	3	0	0	0	7.9	4	32	0	16	6
<b>Hourly Total</b>	<b>24</b>	<b>0</b>	<b>22</b>	<b>8</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>127</b>	<b>84</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>11</b>	<b>128</b>	<b>0</b>	<b>56</b>	<b>17</b>
12:00 - 12:15	2	0	7	2	6	0	0	0	25.8	17	0	0	1	0	0	0	0	0	1.0	1	29	0	8	3
12:15 - 12:30	7	0	4	2	10	0	0	0	37.0	23	0	0	0	1	0	0	0	0	1.5	1	35	1	7	6
12:30 - 12:45	2	0	0	3	11	0	0	0	31.8	16	0	0	0	0	0	0	0	0	0.0	0	32	0	9	5
12:45 - 13:00	2	0	5	0	4	0	0	0	16.2	11	0	0	0	0	0	0	0	0	0.0	0	33	0	9	4
<b>Hourly Total</b>	<b>13</b>	<b>0</b>	<b>16</b>	<b>7</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>111</b>	<b>67</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>129</b>	<b>1</b>	<b>33</b>	<b>18</b>
13:00 - 13:15	11	0	5	1	6	0	0	0	31.3	23	0	0	1	0	1	0	0	0	3.3	2	31	1	12	7
13:15 - 13:30	6	0	9	3	6	0	0	0	33.3	24	0	0	0	1	2	0	0	0	6.1	3	33	0	14	4
13:30 - 13:45	7	0	4	1	10	0	0	0	35.5	22	1	0	0	0	1	0	0	0	3.3	2	43	1	12	9
13:45 - 14:00	15	0	3	6	10	0	0	0	50.0	34	0	0	0	1	1	0	0	0	3.8	2	24	0	15	2
<b>Hourly Total</b>	<b>39</b>	<b>0</b>	<b>21</b>	<b>11</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>150</b>	<b>103</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>9</b>	<b>131</b>	<b>2</b>	<b>53</b>	<b>22</b>
14:00 - 14:15	5	0	4	3	5	0	0	0	25.0	17	1	0	0	0	0	0	0	0	1.0	1	32	0	11	6
14:15 - 14:30	2	0	4	1	4	0	0	0	16.7	11	0	0	0	0	2	0	0	0	4.6	2	39	0	19	5
14:30 - 14:45	5	0	6	4	5	0	0	0	28.5	20	0	0	0	1	1	0	0	0	3.8	2	33	0	11	8
14:45 - 15:00	4	1	5	4	5	0	0	0	27.5	19	0	0	0	1	1	0	0	0	3.8	2	40	0	15	7
<b>Hourly Total</b>	<b>16</b>	<b>1</b>	<b>19</b>	<b>12</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>98</b>	<b>67</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>7</b>	<b>144</b>	<b>0</b>	<b>56</b>	<b>26</b>
15:00 - 15:15	3	0	6	5	9	0	0	0	37.2	23	0	0	0	0	0	0	0	0	0.0	0	23	2	16	9
15:15 - 15:30	4	0	6	2	7	0	0	0	29.1	19	1	0	0	0	0	0	0	0	1.0	1	36	2	16	5
15:30 - 15:45	3	0	6	1	12	0	0	0	38.1	22	0	0	1	0	1	0	0	0	3.3	2	50	0	8	5
15:45 - 16:00	4	0	7	0	5	0	0	0	22.5	16	0	0	0	0	2	0	0	0	4.6	2	33	0	12	7
<b>Hourly Total</b>	<b>14</b>	<b>0</b>	<b>25</b>	<b>8</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>127</b>	<b>80</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>5</b>	<b>142</b>	<b>4</b>	<b>52</b>	<b>26</b>
16:00 - 16:15	8	0	3	3	4	0	0	0	24.7	18	0	0	0	0	0	0	0	0	0.0	0	38	0	11	3
16:15 - 16:30	8	0	5	0	3	0	0	0	19.9	16	0	0	0	0	0	0	0	0	0.0	0	45	0	13	9
16:30 - 16:45	6	0	3	1	3	0	0	0	17.4	13	1	0	0	0	1	0	0	0	3.3	2	49	0	21	4
16:45 - 17:00	7	0	2	0	3	0	0	0	15.9	12	0	0	0	0	0	0	0	0	0.0	0	53	0	13	7
<b>Hourly Total</b>	<b>29</b>	<b>0</b>	<b>13</b>	<b>4</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>78</b>	<b>59</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>185</b>	<b>0</b>	<b>58</b>	<b>23</b>
17:00 - 17:15	5	1	2	0	4	0	0	0	17.2	12	0	0	1	0	0	0	0	0	1.0	1	43	0	11	2
17:15 - 17:30	5	0	2	0	2	0	0	0	11.6	9	1	0	0	0	0	0	0	0	1.0	1	49	0	13	5
17:30 - 17:45	8	0	1	1	0	0	0	0	10.5	10	0	0	1	0	0	0	0	0	1.0	1	60	0	8	3
17:45 - 18:00	7	0	1	1	0	0	0	0	9.5	9	1	0	0	0	0	0	0	0	1.0	1	53	0	9	0
<b>Hourly Total</b>	<b>25</b>	<b>1</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>	<b>40</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>205</b>	<b>0</b>	<b>41</b>	<b>10</b>
18:00 - 18:15	1	0	0	1	2	0	0	0	7.1	4	1	0	0	0	0	0	0	0	1.0	1	54	0	12	5
18:15 - 18:30	6	0	1	0	0	0	0	0	7.0	7	0	0	0	0	0	0	0	0	0.0	0	57	0	7	0
18:30 - 18:45	0	0	1	0	1	0	0	0	3.3	2	1	0	0	0	0	0	0	0	1.0	1	35	0	12	1
18:45 - 19:00	2	0	2	0	1	0	0	0	6.3	5	1	0	0	0	0	0	0	0	1.0	1	39	0	6	5
<b>Hourly Total</b>	<b>9</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>18</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>185</b>	<b>0</b>	<b>37</b>	<b>11</b>
<b>Session Total</b>	<b>494</b>	<b>3</b>	<b>206</b>	<b>94</b>	<b>291</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1514</b>	<b>1089</b>	<b>444</b>	<b>0</b>	<b>152</b>	<b>28</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>1</b>						

B to A						B to B									
OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
8	4	0	1	162.3	147	0	0	0	0	0	0	0	0	0.0	0
5	0	0	2	167.3	160	0	0	0	0	0	0	0	0	0.0	0
1	0	0	0	174.3	170	0	0	0	0	0	0	0	0	0.0	0
4	0	0	1	123.6	117	0	0	0	0	0	0	0	0	0.0	0
18	4	0	4	628	594	0	0	0	0	0	0	0	0	0	0
4	0	0	0	108.7	100	0	0	0	0	0	0	0	0	0.0	0
4	0	0	1	98.1	91	0	0	0	0	0	0	0	0	0.0	0
7	0	0	0	86.1	74	0	0	0	0	0	0	0	0	0.0	0
4	0	0	1	72.6	66	0	0	0	0	0	0	0	0	0.0	0
19	0	0	2	366	331	0	0	0	0	0	0	0	0	0	0
7	0	0	0	79.1	67	0	0	0	0	0	0	0	0	0.0	0
4	0	0	0	52.2	46	0	0	0	0	0	0	0	0	0.0	0
4	0	0	1	72.1	64	0	0	0	0	0	0	0	0	0.0	0
2	1	0	0	41.6	36	0	0	0	0	0	0	0	0	0.0	0
17	1	0	1	245	213	0	0	0	0	0	0	0	0	0	0
5	0	0	0	54.0	46	0	0	0	0	0	0	0	0	0.0	0
3	0	0	0	54.4	46	0	0	0	0	0	0	0	0	0.0	0
5	0	0	2	49.3	43	0	0	0	0	0	0	0	0	0.0	0
7	0	0	1	71.5	62	0	0	0	0	0	0	0	0	0.0	0
20	0	0	3	229	197	0	0	0	0	0	0	0	0	0	0
4	0	0	1	56.1	49	0	0	0	0	0	0	0	0	0.0	0
2	0	0	1	59.0	55	0	0	0	0	0	0	0	0	0.0	0
5	0	0	1	63.9	57	0	0	0	0	0	0	0	0	0.0	0
2	0	0	0	61.6	56	0	0	0	0	0	0	0	0	0.0	0
13	0	0	3	241	217	0	0	0	0	0	0	0	0	0	0
3	1	0	1	50.8	45	0	0	0	0	0	0	0	0	0.0	0
1	0	0	2	55.1	52	0	0	0	0	0	0	0	0	0.0	0
6	0	0	0	62.3	52	0	0	0	0	0	0	0	0	0.0	0
3	0	0	0	54.9	49	0	0	0	0	0	0	0	0	0.0	0
13	1	0	3	223	198	0	0	0	0	0	0	0	0	0	0
5	0	0	0	66.0	56	0	0	0	0	0	0	0	0	0.0	0
1	0	0	0	55.3	52	0	0	0	0	0	0	0	0	0.0	0
6	1	0	1	85.7	73	0	0	0	0	0	0	0	0	0.0	0
5	0	0	0	53.5	46	0	0	0	0	0	0	0	0	0.0	0
17	1	0	1	261	227	0	0	0	0	0	0	0	0	0	0
4	0	0	0	61.2	53	0	0	0	0	0	0	0	0	0.0	0
3	0	0	0	72.4	66	0	0	0	0	0	0	0	0	0.0	0
6	1	0	0	71.8	59	0	0	0	0	0	0	0	0	0.0	0
4	0	0	0	74.7	66	0	0	0	0	0	0	0	0	0.0	0
17	1	0	0	280	244	0	0	0	0	0	0	0	0	0	0
3	1	0	0	63.4	54	0	0	0	0	0	0	0	0	0.0	0
3	0	0	0	68.4	62	0	0	0	0	0	0	0	0	0.0	0
8	1	0	0	85.9	72	0	0	0	0	0	0	0	0	0.0	0
3	0	1	0	62.6	56	0	0	0	0	0	0	0	0	0.0	0
17	2	1	0	280	244	0	0	0	0	0	0	0	0	0	0
2	0	0	1	58.5	55	0	0	0	0	0	0	0	0	0.0	0
2	0	0	0	76.1	69	0	0	0	0	0	0	0	0	0.0	0
6	0	0	1	90.2	81	0	0	0	0	0	0	0	0	0.0	0
0	0	0	0	76.5	73	0	0	0	0	0	0	0	0	0.0	0
10	0	0	2	301	278	0	0	0	0	0	0	0	0	0	0
1	0	0	0	59.3	57	0	0	0	0	0	0	0	0	0.0	0
1	0	0	0	71.8	68	0	0	0	0	0	0	0	0	0.0	0
2	0	0	0	77.1	73	0	0	0	0	0	0	0	0	0.0	0
0	0	0	3	63.2	65	0	0	0	0	0	0	0	0	0.0	0
4	0	0	3	271	263	0	0	0	0	0	0	0	0	0	0
0	0	0	0	73.5	71	0	0	0	0	0	0	0	0	0.0	0
0	1	0	0	66.0	65	0	0	0	0	0	0	0	0	0.0	0
0	1	0	0	50.5	49	0	0	0	0	0	0	0	0	0.0	0
0	1	0	0	54.5	51	0	0	0	0	0	0	0	0	0.0	0
0	3	0	0	245	236	0	0	0	0	0	0	0	0	0	0
165	13	1	22	3569	3242	0	0	0	0	0	0	0	0	0	0

TIME	From B						
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE
07:00 - 07:15	177	1	74	8	25	4	0
07:15 - 07:30	250	1	80	13	17	0	0
07:30 - 07:45	304	1	95	13	17	0	0
07:45 - 08:00	197	0	67	8	8	0	0
Hourly Total	928	3	316	42	67	4	0
08:00 - 08:15	123	0	28	8	15	0	0
08:15 - 08:30	89	1	21	8	12	0	1
08:30 - 08:45	74	0	15	13	20	0	0
08:45 - 09:00	74	0	15	5	15	0	0
Hourly Total	360	1	79	34	62	0	1
09:00 - 09:15	57	0	16	7	16	0	0
09:15 - 09:30	45	2	11	7	8	0	0
09:30 - 09:45	53	0	13	12	18	0	0
09:45 - 10:00	31	1	19	8	9	1	0
Hourly Total	186	3	59	34	51	1	0
10:00 - 10:15	30	1	21	7	16	0	0
10:15 - 10:30	35	1	18	10	17	0	0
10:30 - 10:45	31	0	18	5	14	0	0
10:45 - 11:00	53	0	16	3	10	0	0
Hourly Total	149	2	73	25	57	0	0
11:00 - 11:15	32	0	22	8	13	0	0
11:15 - 11:30	45	0	13	6	12	0	0
11:30 - 11:45	40	0	24	6	12	0	0
11:45 - 12:00	36	0	19	8	13	0	0
Hourly Total	153	0	78	28	50	0	0
12:00 - 12:15	31	0	16	5	9	1	0
12:15 - 12:30	42	1	11	9	11	0	0
12:30 - 12:45	34	0	9	8	17	0	0
12:45 - 13:00	35	0	14	4	7	0	0
Hourly Total	142	1	50	26	44	1	0
13:00 - 13:15	42	1	18	8	12	0	0
13:15 - 13:30	39	0	23	8	9	0	0
13:30 - 13:45	51	1	16	10	17	1	0
13:45 - 14:00	39	0	18	9	16	0	0
Hourly Total	171	2	75	35	54	1	0
14:00 - 14:15	38	0	15	9	9	0	0
14:15 - 14:30	41	0	23	6	9	0	0
14:30 - 14:45	38	0	17	13	12	1	0
14:45 - 15:00	44	1	20	12	10	0	0
Hourly Total	161	1	75	40	40	1	0
15:00 - 15:15	26	2	22	14	12	1	0
15:15 - 15:30	41	2	22	7	10	0	0
15:30 - 15:45	53	0	15	6	21	1	0
15:45 - 16:00	37	0	19	7	10	0	1
Hourly Total	157	4	78	34	53	2	1
16:00 - 16:15	46	0	14	6	6	0	0
16:15 - 16:30	53	0	18	9	5	0	0
16:30 - 16:45	56	0	24	5	10	0	0
16:45 - 17:00	60	0	15	7	3	0	0
Hourly Total	215	0	71	27	24	0	0
17:00 - 17:15	48	1	14	2	5	0	0
17:15 - 17:30	55	0	15	5	3	0	0
17:30 - 17:45	68	0	10	4	2	0	0
17:45 - 18:00	61	0	10	1	0	0	0
Hourly Total	232	1	49	12	10	0	0
18:00 - 18:15	56	0	12	6	2	0	0
18:15 - 18:30	63	0	8	0	0	1	0
18:30 - 18:45	36	0	13	1	1	1	0
18:45 - 19:00	42	0	8	5	1	1	0
Hourly Total	197	0	41	12	4	3	0
Session Total	3051	18	1044	349	516	13	2







**Rainham - Manual Traffic and Queue Length Survey: Tuesday, 19 March 2024**

Produced by Streetwise Services Ltd.

**Junction:** A - (North East) Ferry Lane / B - Offslip A13 / C - (South West) Ferry Lane / D - Onslip A13

**Approach:** C - (South West) Ferry Lane

TIME	C to D										C to A										Car	Taxi	LGV	OGV1
	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL				
07:00 - 07:15	2	0	4	1	3	0	0	0	14.4	10	11	0	3	1	4	1	0	0	26.7	20	0	0	0	0
07:15 - 07:30	3	0	1	1	4	0	0	0	14.7	9	3	0	7	4	16	0	0	0	52.8	30	0	0	0	0
07:30 - 07:45	1	0	2	0	5	0	0	0	14.5	8	5	0	6	4	13	0	0	0	46.9	28	0	0	0	0
07:45 - 08:00	1	0	3	0	8	0	0	0	22.4	12	8	0	4	6	9	0	0	0	41.7	27	0	0	0	0
<b>Hourly Total</b>	<b>7</b>	<b>0</b>	<b>10</b>	<b>2</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>66</b>	<b>39</b>	<b>27</b>	<b>0</b>	<b>20</b>	<b>15</b>	<b>42</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>168</b>	<b>105</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
08:00 - 08:15	0	0	4	3	2	0	0	0	13.1	9	5	0	5	2	6	0	0	0	26.8	18	0	0	0	0
08:15 - 08:30	3	0	2	1	4	0	0	0	15.7	10	2	0	8	1	7	0	0	0	27.6	18	0	0	0	0
08:30 - 08:45	0	0	0	2	5	0	0	0	14.5	7	5	0	4	3	6	0	0	0	27.3	18	0	0	0	0
08:45 - 09:00	2	1	0	4	5	0	0	0	20.5	12	9	0	7	2	4	0	0	0	28.2	22	0	0	0	0
<b>Hourly Total</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>10</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>38</b>	<b>21</b>	<b>0</b>	<b>24</b>	<b>8</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>110</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
09:00 - 09:15	3	0	3	1	5	0	0	0	19.0	12	9	0	3	5	10	0	0	0	42.5	27	0	0	0	0
09:15 - 09:30	4	0	3	5	8	0	0	0	32.9	20	16	0	3	1	11	0	0	0	45.8	31	0	0	0	0
09:30 - 09:45	4	0	8	1	8	0	0	0	31.9	21	11	0	8	3	7	0	0	1	40.0	30	0	0	0	0
09:45 - 10:00	8	0	1	1	9	0	0	0	31.2	19	6	0	6	5	5	0	0	0	31.0	22	0	0	0	0
<b>Hourly Total</b>	<b>19</b>	<b>0</b>	<b>15</b>	<b>8</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>115</b>	<b>72</b>	<b>42</b>	<b>0</b>	<b>20</b>	<b>14</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>159</b>	<b>110</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
10:00 - 10:15	3	0	2	3	8	0	0	0	27.9	16	8	0	9	4	10	0	0	0	46.0	31	0	0	0	0
10:15 - 10:30	5	0	3	3	10	0	0	0	35.5	21	11	0	9	3	11	0	0	0	49.8	34	0	0	0	0
10:30 - 10:45	3	0	4	3	7	0	0	0	27.6	17	12	0	14	1	10	0	0	1	50.9	38	0	0	0	0
10:45 - 11:00	2	0	4	2	12	0	0	0	36.6	20	8	0	8	4	12	0	0	1	50.0	33	0	0	0	0
<b>Hourly Total</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>11</b>	<b>37</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>128</b>	<b>74</b>	<b>39</b>	<b>0</b>	<b>40</b>	<b>12</b>	<b>43</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>197</b>	<b>136</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
11:00 - 11:15	12	0	3	5	8	0	0	0	40.9	28	12	0	6	4	7	0	0	0	40.1	29	0	0	0	0
11:15 - 11:30	11	0	1	1	5	0	0	0	25.0	18	15	0	5	0	8	0	0	1	38.8	29	0	0	0	0
11:30 - 11:45	6	0	2	0	11	0	0	0	33.3	19	7	0	8	2	9	0	0	0	38.7	26	0	0	0	0
11:45 - 12:00	7	0	5	3	8	0	1	0	35.3	24	15	1	10	4	7	0	0	0	48.1	37	0	0	0	0
<b>Hourly Total</b>	<b>36</b>	<b>0</b>	<b>11</b>	<b>9</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>135</b>	<b>89</b>	<b>49</b>	<b>1</b>	<b>29</b>	<b>10</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>166</b>	<b>121</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
12:00 - 12:15	2	0	3	1	5	0	0	0	18.0	11	22	0	12	6	6	0	0	0	56.8	46	0	0	0	0
12:15 - 12:30	11	0	4	3	3	0	0	0	26.4	21	18	0	10	5	9	0	0	0	56.2	42	0	0	0	0
12:30 - 12:45	3	0	6	1	5	0	1	0	22.4	16	17	0	7	0	6	0	0	0	37.8	30	0	0	0	0
12:45 - 13:00	3	0	2	3	7	0	0	0	25.6	15	13	0	6	5	9	0	0	0	47.2	33	0	0	0	0
<b>Hourly Total</b>	<b>19</b>	<b>0</b>	<b>15</b>	<b>8</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>92</b>	<b>63</b>	<b>70</b>	<b>0</b>	<b>35</b>	<b>16</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>198</b>	<b>151</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
13:00 - 13:15	4	0	1	0	10	0	0	1	28.4	16	13	0	6	2	10	0	0	0	45.0	31	0	0	0	0
13:15 - 13:30	4	0	3	1	5	0	0	0	20.0	13	16	0	6	4	7	0	0	1	44.5	34	0	0	0	0
13:30 - 13:45	1	0	3	1	10	0	0	0	28.5	15	9	0	6	4	5	0	0	0	32.5	24	0	0	0	0
13:45 - 14:00	5	0	4	2	10	0	0	0	35.0	21	26	0	6	6	11	0	0	0	66.3	49	0	0	0	0
<b>Hourly Total</b>	<b>14</b>	<b>0</b>	<b>11</b>	<b>4</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>112</b>	<b>65</b>	<b>64</b>	<b>0</b>	<b>24</b>	<b>16</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>188</b>	<b>138</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
14:00 - 14:15	17	0	5	3	4	0	0	0	35.7	29	59	0	12	7	9	0	0	0	102.2	87	0	0	0	0
14:15 - 14:30	11	0	3	1	8	0	0	0	33.9	23	12	0	4	5	9	0	0	1	44.6	31	0	0	0	0
14:30 - 14:45	6	0	3	0	6	0	0	0	22.8	15	24	0	7	4	9	0	0	0	57.7	44	0	0	0	0
14:45 - 15:00	5	0	2	5	5	0	0	0	26.0	17	15	0	12	3	5	0	0	0	43.0	35	0	0	0	0
<b>Hourly Total</b>	<b>39</b>	<b>0</b>	<b>13</b>	<b>9</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>118</b>	<b>84</b>	<b>110</b>	<b>0</b>	<b>35</b>	<b>19</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>248</b>	<b>197</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
15:00 - 15:15	10	1	5	1	9	0	0	0	38.2	26	37	0	9	4	12	1	0	1	82.0	64	0	0	0	0
15:15 - 15:30	11	0	5	4	9	0	0	0	42.7	29	22	0	9	2	8	0	0	0	52.4	41	0	0	0	0
15:30 - 15:45	11	0	4	1	15	0	0	0	51.0	31	33	0	14	1	8	0	0	0	66.9	56	0	0	0	0
15:45 - 16:00	9	0	5	1	13	0	0	0	45.4	28	26	0	7	3	8	0	0	0	55.9	44	0	0	0	0
<b>Hourly Total</b>	<b>41</b>	<b>1</b>	<b>19</b>	<b>7</b>	<b>46</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>177</b>	<b>114</b>	<b>118</b>	<b>0</b>	<b>39</b>	<b>10</b>	<b>36</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>257</b>	<b>205</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:00 - 16:15	16	0	2	0	5	0	0	0	29.5	23	61	0	13	2	9	0	1	2	98.7	88	0	0	0	0
16:15 - 16:30	19	0	2	0	4	0	0	0	30.2	25	45	0	6	1	8	0	0	2	71.7	62	0	0	0	0
16:30 - 16:45	27	0	4	1	1	0	0	0	34.8	33	89	0	10	2	5	0	0	0	113.5	106	0	0	0	0
16:45 - 17:00	17	0	3	0	4	0	0	0	29.2	24	46	0	5	1	2	0	2	0	57.9	56	0	0	0	0
<b>Hourly Total</b>	<b>79</b>	<b>0</b>	<b>11</b>	<b>1</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>124</b>	<b>105</b>	<b>241</b>	<b>0</b>	<b>34</b>	<b>6</b>	<b>24</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>342</b>	<b>312</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
17:00 - 17:15	24	0	3	1	2	0	0	0	33.1	30	87	0	8	0	3	0	4	1	103.1	103	0	0	0	0
17:15 - 17:30	19	0	5	0	0	0	0	0	24.0	24	53	0	8	1	1	0	1	0	65.0	64	0	0	0	0
17:30 - 17:45	17	0	1	1	0	0	0	0	19.5	19	44	0	5	3	2	0	0	1	58.5	55	0	0	0	0
17:45 - 18:00	11	1	0	0	1	0	0	0	14.3	13	26	0	8	0	1	0	0	0	36.3	35	0	0	0	0
<b>Hourly Total</b>	<b>71</b>	<b>1</b>	<b>9</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>91</b>	<b>86</b>	<b>210</b>	<b>0</b>	<b>29</b>	<b>4</b>	<b>7</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>263</b>	<b>257</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
18:00 - 18:15	5	0	2	0	0	0	0	0	7.0	7	18	0	3	1	2	0	0	0	27.1	24	0	0	0	0
18:15 - 18:30	6	0	1	0	2	0	0	0	11.6	9	30	0	2	0	0	0	0	0	32.0	32	0	0	0	0
18:30 - 18:45	6	0	0	0	1	0	0	0	8.3	7	4	0	1	0	1	0	0	0	7.3	6	0	0	0	0
18:45 - 19:00	3	0	1	1	0	0	0	0	5.5	5	10	0	0	0	0	0	0	0	10.0	10	0	0	0	0
<b>Hourly Total</b>	<b>20</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>28</b>	<b>62</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>76</b>	<b>72</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Session Total</b>	<b>363</b>	<b>3</b>	<b>137</b>	<b>72</b>	<b>279</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1254</b>	<b>857</b>	<b>1053</b>	<b>1</b>	<b>33</b>											



			To C									
M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
0	41.1	30	50	0	12	2	10	0	1	0	88.2	75
0	67.5	39	55	0	13	5	11	0	0	0	100.8	84
0	61.4	36	50	0	12	8	12	0	1	2	102.6	85
0	64.1	39	89	0	7	1	7	0	0	2	114.4	106
0	234	144	244	0	44	16	40	0	2	4	406	350
0	39.9	27	70	0	13	3	11	0	0	1	113.2	98
0	43.3	28	52	0	10	7	11	0	3	0	98.4	83
0	41.8	25	49	0	6	8	15	0	0	0	101.5	78
0	48.7	34	59	0	8	5	17	0	0	0	113.6	89
0	174	114	230	0	37	23	54	0	3	1	427	348
0	61.5	39	39	0	7	3	13	0	0	0	80.4	62
0	78.7	51	30	1	6	5	9	0	0	1	65.6	52
1	71.9	51	36	0	9	9	19	0	0	0	102.2	73
0	62.2	41	27	0	20	6	17	0	0	1	95.5	71
1	274	182	132	1	42	23	58	0	0	2	344	258
0	73.9	47	20	0	11	10	17	0	0	0	85.1	58
0	85.3	55	17	0	11	6	22	0	0	1	88.0	57
1	81.5	57	21	1	17	7	19	0	1	0	93.4	66
1	86.6	53	29	0	13	3	16	0	0	0	83.3	61
2	327	212	87	1	52	26	74	0	1	1	350	242
0	81.0	57	18	0	13	6	15	0	0	2	75.3	54
1	63.8	47	21	0	8	3	18	0	0	0	74.9	50
0	72.0	45	24	0	13	6	9	0	0	0	66.7	52
1	83.4	61	12	0	8	6	14	0	0	0	61.2	40
2	300	210	75	0	42	21	56	0	0	2	278	196
0	74.8	57	19	0	13	6	9	0	0	0	61.7	47
0	84.1	64	24	0	17	6	15	0	0	0	84.5	62
1	60.2	46	17	0	8	5	22	0	0	1	83.5	53
0	72.8	48	12	0	12	4	13	0	1	0	60.1	42
1	292	215	72	0	50	21	59	0	1	1	290	204
1	73.4	47	29	0	10	6	10	0	0	2	71.8	57
1	66.0	48	19	0	17	4	21	0	0	0	90.3	61
0	61.0	39	25	0	11	4	18	0	0	1	83.8	59
0	101.3	70	25	0	7	12	17	0	0	0	89.1	61
2	302	204	98	0	45	26	66	0	0	3	335	238
0	137.9	116	17	0	16	7	14	0	0	0	75.7	54
1	79.5	55	22	0	13	4	13	0	0	0	70.9	52
0	80.5	59	13	0	13	12	12	0	0	0	71.6	50
0	70.0	53	15	1	12	6	22	1	0	0	89.6	57
1	368	283	67	1	54	29	61	1	0	0	308	213
1	120.2	90	15	0	11	13	24	0	0	0	100.7	63
0	95.1	70	12	0	17	6	21	0	0	0	86.3	56
0	117.9	87	13	0	11	1	24	0	0	0	80.7	49
0	101.3	72	17	0	9	2	17	0	0	0	68.1	45
1	435	319	57	0	48	22	86	0	0	0	336	213
2	129.2	112	12	0	7	4	16	0	0	0	61.8	39
2	101.9	87	18	0	9	2	11	0	0	0	55.3	40
0	148.3	139	11	0	4	3	5	0	0	0	31.0	23
2	87.1	80	17	0	5	2	6	0	0	0	38.8	30
6	467	418	58	0	25	11	38	0	0	0	187	132
1	136.2	133	14	1	4	2	6	0	0	0	35.8	27
0	90.0	89	13	0	3	2	3	0	0	0	25.9	21
1	78.0	74	15	0	3	1	0	0	0	0	19.5	19
0	50.6	48	17	0	4	1	2	0	0	0	27.1	24
2	355	344	59	1	14	6	11	0	0	0	108	91
0	34.1	31	8	0	0	1	2	0	0	0	14.1	11
0	43.6	41	10	0	3	0	2	0	1	0	17.8	16
0	15.6	13	7	0	2	0	1	0	0	0	11.3	10
0	15.5	15	5	0	3	0	2	0	0	0	12.6	10
0	109	100	30	0	8	1	7	0	1	0	56	47
18	3636	2745	1209	4	461	225	610	1	8	14	3424	2532



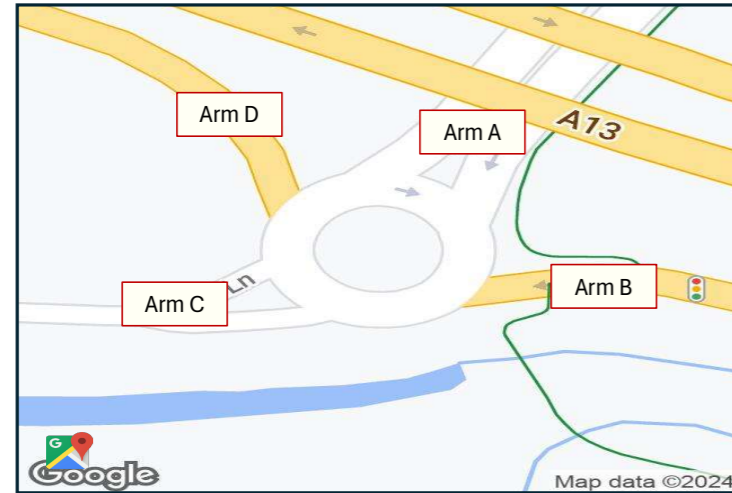


			To D									
M/CYCLE	PCU	TOTAL	Car	Taxi	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL
0	0.0	0	67	0	42	8	19	2	0	2	169.5	140
0	0.0	0	150	0	48	7	15	0	0	1	243.4	221
0	0.0	0	187	0	54	8	12	0	0	0	280.6	261
0	0.0	0	110	0	33	4	11	0	0	0	174.3	158
0	0	0	514	0	177	27	57	2	0	3	868	780
0	0.0	0	35	0	11	9	7	0	0	1	76.0	63
0	0.0	0	17	1	9	5	7	1	0	3	53.8	43
0	0.0	0	23	0	9	7	8	0	0	1	61.3	48
0	0.0	0	23	1	4	10	6	0	0	0	56.8	44
0	0	0	98	2	33	31	28	1	0	5	248	198
0	0.0	0	26	1	13	6	7	0	0	0	65.1	53
0	0.0	0	25	0	14	10	11	0	0	0	79.3	60
0	0.0	0	30	0	14	7	15	1	0	1	91.4	68
0	0.0	0	36	0	5	7	10	0	0	3	75.7	61
0	0	0	117	1	46	30	43	1	0	4	312	242
0	0.0	0	44	0	9	10	13	0	0	0	97.9	76
0	0.0	0	43	0	15	12	15	0	0	0	110.5	85
0	0.0	0	39	5	15	8	10	0	0	0	94.0	77
0	0.0	0	29	2	10	7	15	0	0	0	86.0	63
0	0	0	155	7	49	37	53	0	0	0	388	301
0	0.0	0	34	3	10	8	9	0	0	0	79.7	64
0	0.0	0	33	1	14	5	10	2	0	0	82.5	65
0	0.0	0	41	1	10	5	15	2	0	0	98.0	74
0	0.0	0	43	4	20	8	14	1	0	2	114.0	92
0	0	0	151	9	54	26	48	5	0	2	374	295
0	0.0	0	29	2	19	7	11	0	0	1	86.2	69
0	0.0	0	38	1	13	8	6	3	0	0	83.8	69
0	0.0	0	30	1	13	8	8	1	0	1	76.8	62
0	0.0	0	37	0	12	9	9	1	0	1	85.6	69
0	0	0	134	4	57	32	34	5	0	3	332	269
0	0.0	0	33	1	17	6	16	2	0	1	101.2	76
0	0.0	0	35	2	14	6	13	0	0	1	90.3	71
0	0.0	0	30	3	12	5	13	1	0	1	84.8	65
0	0.0	0	32	0	8	5	13	0	0	0	77.4	58
0	0	0	130	6	51	22	55	3	0	3	354	270
0	0.0	0	55	0	15	10	4	0	0	2	95.0	86
0	0.0	0	45	1	16	6	13	2	0	0	104.9	83
0	0.0	0	37	4	10	4	8	0	0	0	75.4	63
0	0.0	0	23	1	11	8	8	1	0	0	67.4	52
0	0	0	160	6	52	28	33	3	0	2	343	284
0	0.0	0	37	1	13	7	12	0	0	1	89.5	71
0	0.0	0	36	1	12	4	10	0	0	0	78.0	63
0	0.0	0	42	1	18	4	16	0	0	1	104.2	82
0	0.0	0	44	0	17	3	15	0	0	2	100.8	81
0	0	0	159	3	60	18	53	0	0	4	373	297
0	0.0	0	40	1	14	3	5	0	0	3	72.2	66
0	0.0	0	53	2	10	3	5	0	0	1	81.4	74
0	0.0	0	61	0	14	2	2	0	0	1	83.0	80
0	0.0	0	42	0	12	1	4	0	0	1	65.1	60
0	0	0	196	3	50	9	46	0	0	6	302	280
0	0.0	0	72	0	9	2	2	0	0	2	89.4	87
0	0.0	0	59	0	11	1	0	0	0	0	71.5	71
0	0.0	0	47	0	9	1	0	0	0	0	57.5	57
0	0.0	0	49	1	5	0	1	0	0	1	57.7	57
0	0	0	227	1	34	4	3	0	0	3	276	272
0	0.0	0	36	0	6	0	0	0	0	0	42.0	42
0	0.0	0	21	2	5	1	2	0	0	0	34.1	31
0	0.0	0	35	0	2	0	1	1	0	0	41.3	39
0	0.0	0	32	1	2	1	0	1	0	0	38.5	37
0	0	0	124	3	15	2	3	2	0	0	156	149
0	0	0	2165	45	678	266	426	22	0	35	4325	3637

## Rainham - Manual Traffic and Queue Length Survey: Tuesday, 19 March 2024

Produced by Streetwise Services Ltd.

Junction: A - (North East) Ferry Lane / B - Offslip A13 / C - (South West) Ferry Lane / D - Onslip A13



Matrix Totals:

Show single Session:

Custom Start / End:

Show Peak Times:

		Arm Destination					
		A	B	C	D	Total	% Total
Arm Origin	A	17	0	1435	2095	3547	100.00%
	B	3242	0	1089	685	5016	100.00%
	C	1880	0	8	857	2745	100.00%
	D	0	0	0	0	0	0.00%
Total		5139	0	2532	3637		
% Total		100.00%	0.00%	100.00%	100.00%		

Classification	Include
Car	Yes
Taxi	Yes
LGV	Yes
OGV1	Yes
OGV2	Yes
BUS	Yes
P/CYCLE	Yes
M/CYCLE	Yes





Rainham: Queue Length Survey - Tuesday, 19 March 2024

Produced by Streetwise Services Ltd.

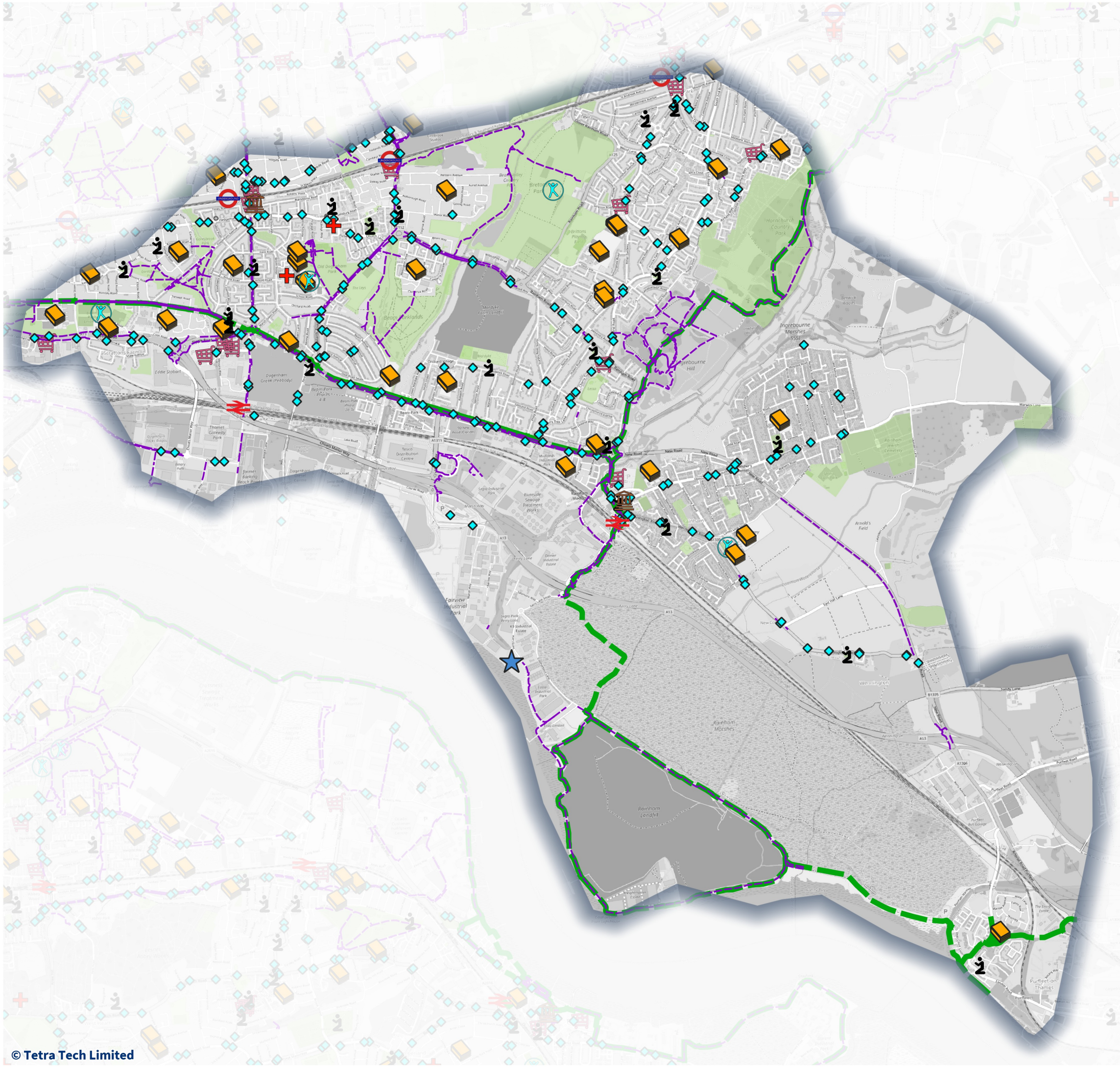
Junction: A - (North East) Ferry Lane / B - Offslip A13 / C - (South West) Ferry Lane / D - Onslip A13

Survey Period	A - (North East) Ferry Lane		B - Offslip A13		C - (South West) Ferry Lane	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
	MAX	MAX	MAX	MAX	MAX	MAX
07:00 - 07:05	0	0	2	2	3	0
07:05 - 07:10	0	0	6	16	4	0
07:10 - 07:15	0	0	11	3	4	0
07:15 - 07:20	0	0	11	6	3	0
07:20 - 07:25	0	0	4	10	8	0
07:25 - 07:30	0	0	4	7	4	0
07:30 - 07:35	0	0	12	8	8	0
07:35 - 07:40	0	0	17	8	10	0
07:40 - 07:45	0	0	3	7	8	0
07:45 - 07:50	0	0	18	17	3	0
07:50 - 07:55	0	0	1	4	4	0
07:55 - 08:00	0	0	1	2	3	0
08:00 - 08:05	0	0	0	2	2	0
08:05 - 08:10	0	0	5	3	3	0
08:10 - 08:15	0	0	2	4	5	0
08:15 - 08:20	0	0	4	4	0	0
08:20 - 08:25	0	0	0	2	1	0
08:25 - 08:30	0	0	0	3	1	0
08:30 - 08:35	0	0	3	1	2	0
08:35 - 08:40	0	0	2	2	1	0
08:40 - 08:45	0	0	2	0	4	0
08:45 - 08:50	0	0	1	2	2	0
08:50 - 08:55	0	0	0	2	0	0
08:55 - 09:00	0	0	0	2	2	0
09:00 - 09:05	0	0	2	2	2	0
09:05 - 09:10	0	0	1	2	6	0
09:10 - 09:15	0	0	0	2	2	0
09:15 - 09:20	0	0	1	2	2	0
09:20 - 09:25	0	0	1	1	0	0
09:25 - 09:30	0	0	2	3	5	0
09:30 - 09:35	0	0	0	2	2	0
09:35 - 09:40	0	0	1	2	5	0
09:40 - 09:45	0	0	2	2	3	0
09:45 - 09:50	0	0	2	0	2	0
09:50 - 09:55	0	0	2	1	0	0
09:55 - 10:00	0	0	0	2	2	0
15:00 - 15:05	0	0	2	3	7	0
15:05 - 15:10	0	0	1	2	2	0
15:10 - 15:15	0	0	1	1	1	1
15:15 - 15:20	0	0	2	2	0	0
15:20 - 15:25	0	0	0	2	3	0
15:25 - 15:30	0	0	0	4	3	0
15:30 - 15:35	0	0	1	6	1	0
15:35 - 15:40	0	0	0	2	3	0
15:40 - 15:45	0	0	2	4	12	0
15:45 - 15:50	0	0	4	2	2	0
15:50 - 15:55	0	0	0	2	2	0
15:55 - 16:00	0	0	0	1	1	0
16:00 - 16:05	0	0	0	2	3	1
16:05 - 16:10	0	0	0	1	4	0
16:10 - 16:15	0	0	2	0	1	0
16:15 - 16:20	0	0	0	1	1	0
16:20 - 16:25	0	0	1	4	2	0
16:25 - 16:30	0	0	0	3	1	0
16:30 - 16:35	0	0	1	2	3	0
16:35 - 16:40	0	0	0	1	4	0
16:40 - 16:45	0	0	1	5	4	0
16:45 - 16:50	0	0	0	1	1	0
16:50 - 16:55	0	0	0	1	0	0
16:55 - 17:00	0	0	0	3	2	0
17:00 - 17:05	0	0	0	1	4	0
17:05 - 17:10	0	0	1	2	4	0
17:10 - 17:15	0	0	0	2	1	0
17:15 - 17:20	0	0	0	3	2	0
17:20 - 17:25	0	0	0	2	2	0
17:25 - 17:30	0	0	1	3	2	0
17:30 - 17:35	0	1	0	2	2	0
17:35 - 17:40	0	0	0	3	4	0
17:40 - 17:45	0	0	0	0	4	0
17:45 - 17:50	0	0	0	3	0	0
17:50 - 17:55	0	0	0	4	1	0
17:55 - 18:00	0	0	0	1	2	0

## APPENDIX E – ATZ ASSESSMENT MAP 1 - 3

---









### ATZ Map One











Land at Frog Island, Ferry Lane, Rainham



### Legend

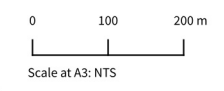
-  Site location
-  Underground
-  National Rail
-  Bus Stop

### Amenities

-  Education Facility
-  Leisure Or Sports Centre
-  Medical Care
-  Place Of Worship
-  Supermarket
-  Town Centre
-  National Cycle Network
-  Cycle Tracks
-  Greenspace
-  20-minute Cycle Catchment

Drawn by: IJC  
 Checked by: PG  
 Office: Leicester

Drawing No.: 784-B065006-004  
 Revision No.: 0001

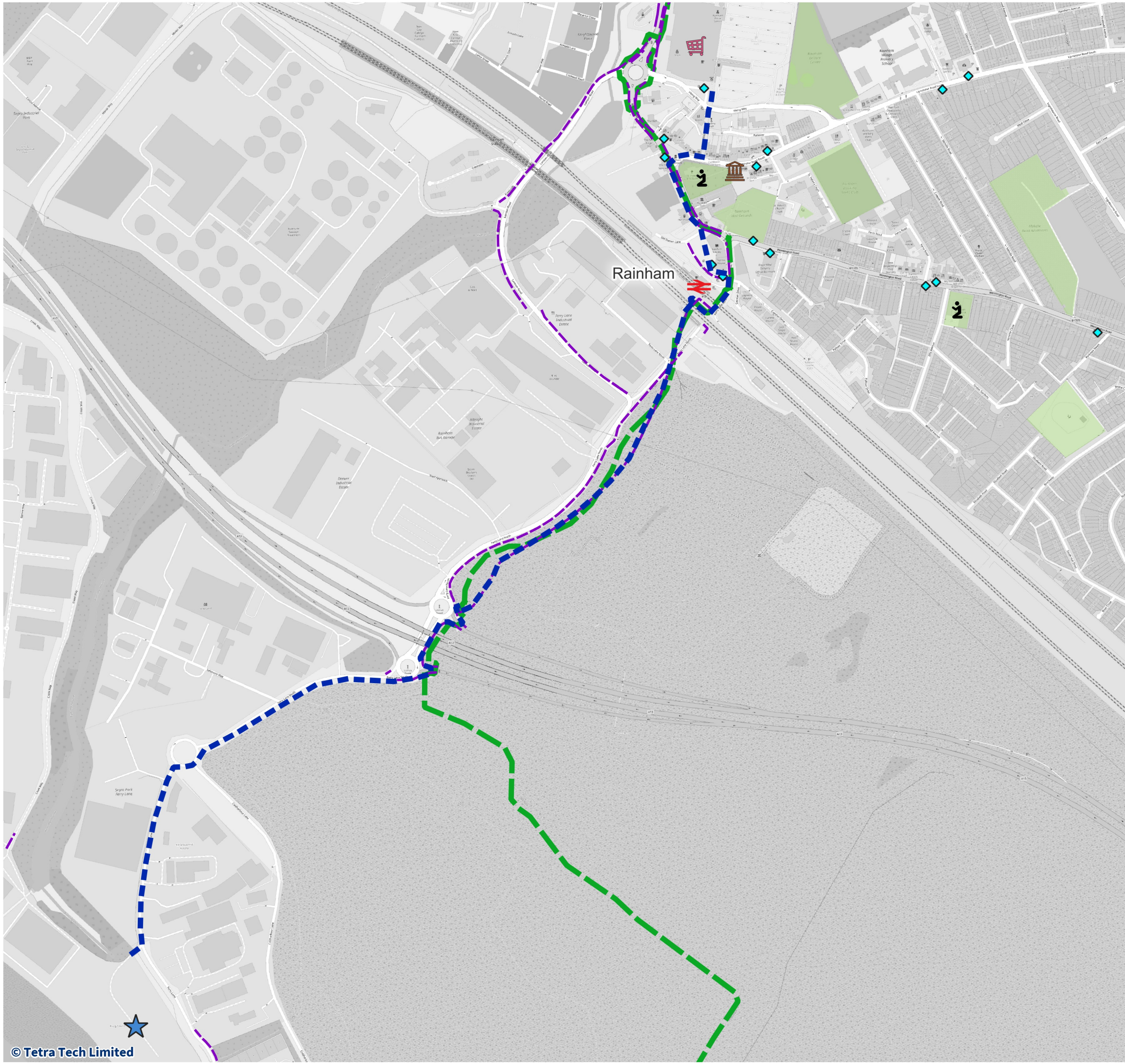


04 April 2024

© Crown Copyright All rights reserved. Licence number: 100019980  
 Open Government Data reproduced contains public sector information licensed under the Open Government Licence v3.0  
 Other Credits: Contains OpenStreetMap data © OpenStreetMap contributors. DSM data is available under the Open Database License, licensed as CC BY-SA.







# ATZ Map Two Key Journeys

Land at Frog Island, Ferry Lane, Rainham



## Legend

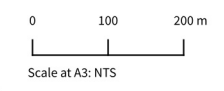
- Site location
- Key Journey
- National Rail
- Bus Stop

## Amenities

- Place Of Worship
- Supermarket
- Town Centre
- National Cycle Network
- Cycle Tracks
- Greenspace

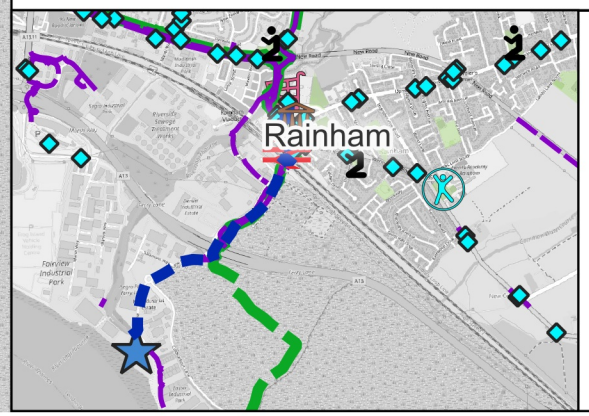
Drawn by: IJC  
Checked by: PG  
Office: Leicester

Drawing No.: 784-B065006-005  
Revision No.: 0001



04 April 2024

© Crown Copyright All rights reserved. Licence number: 100019980  
Open Government Data reproduced contains public sector information licensed under the Open Government Licence v3.0  
Other Credits: Contains OpenStreetMap data © OpenStreetMap contributors. DSM data is available under the Open Database License, licensed as CC BY-SA.





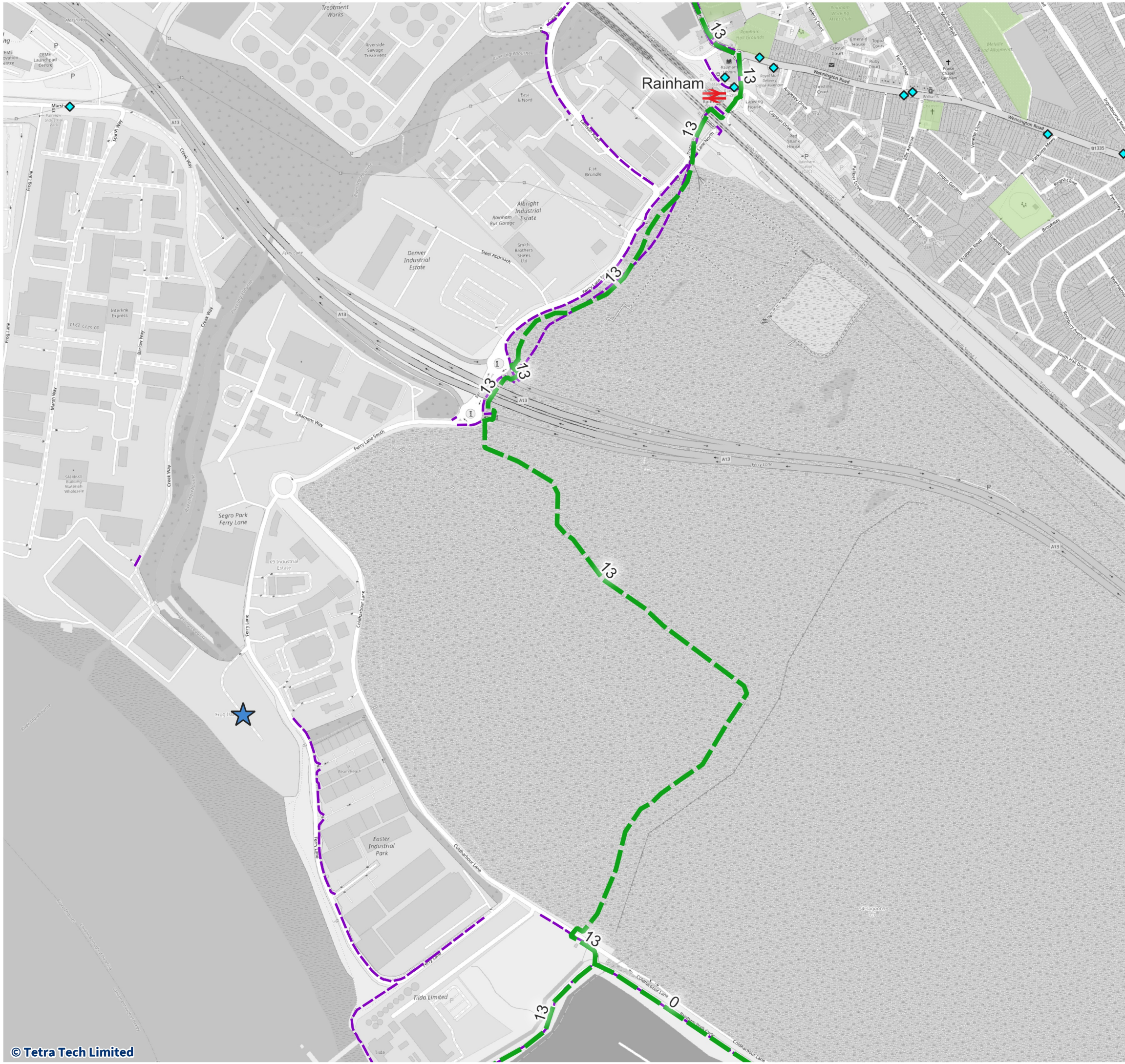
# ATZ Map Three Neighbourhood Characteristics



Land at Frog Island, Ferry Lane, Rainham

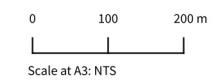
## Legend

-  Site location
-  National Rail
-  Bus Stop
-  National Cycle Network
-  Cycle Tracks
-  Greenspace



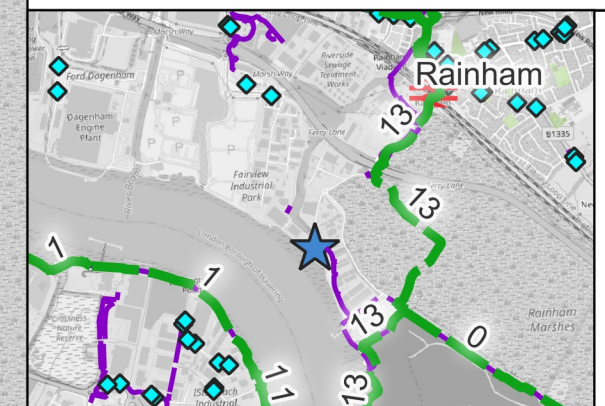
Drawn by: IJC  
Checked by: PG  
Office: Leicester

Drawing No.: 784-B065006-006  
Revision No.: 0001



04 April 2024

© Crown Copyright All rights reserved. Licence number: 100019980  
Open Government Data reproduced contains public sector information licensed under the Open Government Licence v3.0  
Other Credits: Contains OpenStreetMap data © OpenStreetMap contributors. OSM data is available under the Open Database License, licensed as CC BY-SA.







**APPENDIX F - RAW TRIP GENERATION OUTPUT**

---

WYG Executive Park, Avalon Way Leicester

Licence No: 705102

Calculation Reference: AUDIT-705102-240405-0401

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT  
Category : F - WAREHOUSING (COMMERCIAL)  
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	BE BEXLEY	1 days
	HD HILLINGDON	1 days
	HO HOUNSLOW	1 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*



WYG Executive Park, Avalon Way Leicester

Licence No: 705102

## Primary Filtering selection:

*This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.*

Parameter: No of Employees  
 Actual Range: 320 to 402 (units: )  
 Range Selected by User: 272 to 402 (units: )

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 27/09/18

*This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.*

Selected survey days:

Wednesday 1 days  
 Thursday 2 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count 3 days  
 Directional ATC Count 0 days

*This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.*

Selected Locations:

Suburban Area (PPS6 Out of Centre) 1  
 Edge of Town 2

*This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.*

Selected Location Sub Categories:

Industrial Zone 3

*This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.*

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 3 days - Selected  
 Servicing vehicles Excluded X days - Selected

## Secondary Filtering selection:

Use Class:

n/a 1 days  
 B8 2 days

*This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.*

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

WYG Executive Park, Avalon Way Leicester

Licence No: 705102

## Secondary Filtering selection (Cont.):

Population within 1 mile:

20,001 to 25,000	1 days
25,001 to 50,000	2 days

*This data displays the number of selected surveys within stated 1-mile radii of population.*

Population within 5 miles:

250,001 to 500,000	1 days
500,001 or More	2 days

*This data displays the number of selected surveys within stated 5-mile radii of population.*

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	1 days

*This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.*

Travel Plan:

Yes	2 days
No	1 days

*This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.*

PTAL Rating:

1a (Low) Very poor	1 days
1b Very poor	1 days
2 Poor	1 days

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	BE-02-F-01 THAMES ROAD CRAYFORD	FRESH FRUIT DISTRIBUTOR	BEXLEY
	Edge of Town Industrial Zone Total No of Employees: 380 <i>Survey date: THURSDAY 20/09/18</i>		<i>Survey Type: MANUAL</i>
2	HD-02-F-01 NINE ACRES CLOSE HAYES	FOOD DISTRIBUTOR	HILLINGDON
	Edge of Town Industrial Zone Total No of Employees: 402 <i>Survey date: THURSDAY 27/09/18</i>		<i>Survey Type: MANUAL</i>
3	HO-02-F-01 ASCOT ROAD FELTHAM	LOGISTICS AND FREIGHT	HOUNSLOW
	Suburban Area (PPS6 Out of Centre) Industrial Zone Total No of Employees: 320 <i>Survey date: WEDNESDAY 23/11/16</i>		<i>Survey Type: MANUAL</i>

*This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.*

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.45

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.100	3	367	0.036	3	367	0.136
08:00 - 09:00	3	367	0.157	3	367	0.039	3	367	0.196
09:00 - 10:00	3	367	0.081	3	367	0.044	3	367	0.125
10:00 - 11:00	3	367	0.053	3	367	0.053	3	367	0.106
11:00 - 12:00	3	367	0.067	3	367	0.072	3	367	0.139
12:00 - 13:00	3	367	0.073	3	367	0.098	3	367	0.171
13:00 - 14:00	3	367	0.092	3	367	0.074	3	367	0.166
14:00 - 15:00	3	367	0.054	3	367	0.060	3	367	0.114
15:00 - 16:00	3	367	0.055	3	367	0.065	3	367	0.120
16:00 - 17:00	3	367	0.057	3	367	0.083	3	367	0.140
17:00 - 18:00	3	367	0.064	3	367	0.177	3	367	0.241
18:00 - 19:00	3	367	0.064	3	367	0.095	3	367	0.159
19:00 - 20:00	1	380	0.024	1	380	0.124	1	380	0.148
20:00 - 21:00	1	380	0.011	1	380	0.016	1	380	0.027
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.952			1.036			1.988

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	320 - 402 (units: )
Survey date date range:	01/01/16 - 27/09/18
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

*This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.*

WYG Executive Park, Avalon Way Leicester

Licence No: 705102

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL TAXIS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.000	3	367	0.000	3	367	0.000
08:00 - 09:00	3	367	0.002	3	367	0.002	3	367	0.004
09:00 - 10:00	3	367	0.000	3	367	0.000	3	367	0.000
10:00 - 11:00	3	367	0.000	3	367	0.000	3	367	0.000
11:00 - 12:00	3	367	0.000	3	367	0.000	3	367	0.000
12:00 - 13:00	3	367	0.000	3	367	0.000	3	367	0.000
13:00 - 14:00	3	367	0.000	3	367	0.000	3	367	0.000
14:00 - 15:00	3	367	0.000	3	367	0.000	3	367	0.000
15:00 - 16:00	3	367	0.000	3	367	0.000	3	367	0.000
16:00 - 17:00	3	367	0.001	3	367	0.001	3	367	0.002
17:00 - 18:00	3	367	0.000	3	367	0.000	3	367	0.000
18:00 - 19:00	3	367	0.000	3	367	0.000	3	367	0.000
19:00 - 20:00	1	380	0.000	1	380	0.000	1	380	0.000
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.003			0.006

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.



WYG Executive Park, Avalon Way Leicester

Licence No: 705102

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL OGVS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.015	3	367	0.018	3	367	0.033
08:00 - 09:00	3	367	0.012	3	367	0.015	3	367	0.027
09:00 - 10:00	3	367	0.019	3	367	0.017	3	367	0.036
10:00 - 11:00	3	367	0.014	3	367	0.019	3	367	0.033
11:00 - 12:00	3	367	0.016	3	367	0.013	3	367	0.029
12:00 - 13:00	3	367	0.017	3	367	0.019	3	367	0.036
13:00 - 14:00	3	367	0.020	3	367	0.019	3	367	0.039
14:00 - 15:00	3	367	0.017	3	367	0.013	3	367	0.030
15:00 - 16:00	3	367	0.015	3	367	0.015	3	367	0.030
16:00 - 17:00	3	367	0.015	3	367	0.011	3	367	0.026
17:00 - 18:00	3	367	0.012	3	367	0.015	3	367	0.027
18:00 - 19:00	3	367	0.011	3	367	0.007	3	367	0.018
19:00 - 20:00	1	380	0.011	1	380	0.018	1	380	0.029
20:00 - 21:00	1	380	0.011	1	380	0.003	1	380	0.014
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.205			0.202			0.407

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WYG Executive Park, Avalon Way Leicester

Licence No: 705102

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL PSVS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.000	3	367	0.000	3	367	0.000
08:00 - 09:00	3	367	0.000	3	367	0.000	3	367	0.000
09:00 - 10:00	3	367	0.000	3	367	0.000	3	367	0.000
10:00 - 11:00	3	367	0.000	3	367	0.000	3	367	0.000
11:00 - 12:00	3	367	0.000	3	367	0.000	3	367	0.000
12:00 - 13:00	3	367	0.002	3	367	0.002	3	367	0.004
13:00 - 14:00	3	367	0.000	3	367	0.000	3	367	0.000
14:00 - 15:00	3	367	0.001	3	367	0.001	3	367	0.002
15:00 - 16:00	3	367	0.001	3	367	0.001	3	367	0.002
16:00 - 17:00	3	367	0.000	3	367	0.000	3	367	0.000
17:00 - 18:00	3	367	0.003	3	367	0.002	3	367	0.005
18:00 - 19:00	3	367	0.000	3	367	0.001	3	367	0.001
19:00 - 20:00	1	380	0.000	1	380	0.000	1	380	0.000
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.007			0.007			0.014

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL CYCLISTS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.003	3	367	0.001	3	367	0.004
08:00 - 09:00	3	367	0.004	3	367	0.000	3	367	0.004
09:00 - 10:00	3	367	0.000	3	367	0.000	3	367	0.000
10:00 - 11:00	3	367	0.000	3	367	0.000	3	367	0.000
11:00 - 12:00	3	367	0.002	3	367	0.000	3	367	0.002
12:00 - 13:00	3	367	0.001	3	367	0.000	3	367	0.001
13:00 - 14:00	3	367	0.002	3	367	0.002	3	367	0.004
14:00 - 15:00	3	367	0.004	3	367	0.000	3	367	0.004
15:00 - 16:00	3	367	0.000	3	367	0.003	3	367	0.003
16:00 - 17:00	3	367	0.005	3	367	0.010	3	367	0.015
17:00 - 18:00	3	367	0.002	3	367	0.005	3	367	0.007
18:00 - 19:00	3	367	0.004	3	367	0.003	3	367	0.007
19:00 - 20:00	1	380	0.000	1	380	0.000	1	380	0.000
20:00 - 21:00	1	380	0.000	1	380	0.003	1	380	0.003
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.027			0.027			0.054

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WYG Executive Park, Avalon Way Leicester

Licence No: 705102

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.116	3	367	0.040	3	367	0.156
08:00 - 09:00	3	367	0.184	3	367	0.043	3	367	0.227
09:00 - 10:00	3	367	0.091	3	367	0.050	3	367	0.141
10:00 - 11:00	3	367	0.061	3	367	0.063	3	367	0.124
11:00 - 12:00	3	367	0.077	3	367	0.080	3	367	0.157
12:00 - 13:00	3	367	0.086	3	367	0.117	3	367	0.203
13:00 - 14:00	3	367	0.111	3	367	0.083	3	367	0.194
14:00 - 15:00	3	367	0.066	3	367	0.066	3	367	0.132
15:00 - 16:00	3	367	0.063	3	367	0.078	3	367	0.141
16:00 - 17:00	3	367	0.061	3	367	0.100	3	367	0.161
17:00 - 18:00	3	367	0.073	3	367	0.205	3	367	0.278
18:00 - 19:00	3	367	0.073	3	367	0.112	3	367	0.185
19:00 - 20:00	1	380	0.032	1	380	0.147	1	380	0.179
20:00 - 21:00	1	380	0.011	1	380	0.018	1	380	0.029
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.105			1.202			2.307

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WYG Executive Park, Avalon Way Leicester

Licence No: 705102

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.012	3	367	0.002	3	367	0.014
08:00 - 09:00	3	367	0.015	3	367	0.005	3	367	0.020
09:00 - 10:00	3	367	0.012	3	367	0.003	3	367	0.015
10:00 - 11:00	3	367	0.010	3	367	0.005	3	367	0.015
11:00 - 12:00	3	367	0.005	3	367	0.007	3	367	0.012
12:00 - 13:00	3	367	0.011	3	367	0.019	3	367	0.030
13:00 - 14:00	3	367	0.010	3	367	0.013	3	367	0.023
14:00 - 15:00	3	367	0.005	3	367	0.004	3	367	0.009
15:00 - 16:00	3	367	0.004	3	367	0.005	3	367	0.009
16:00 - 17:00	3	367	0.007	3	367	0.008	3	367	0.015
17:00 - 18:00	3	367	0.005	3	367	0.018	3	367	0.023
18:00 - 19:00	3	367	0.002	3	367	0.004	3	367	0.006
19:00 - 20:00	1	380	0.000	1	380	0.005	1	380	0.005
20:00 - 21:00	1	380	0.000	1	380	0.005	1	380	0.005
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.098			0.103			0.201

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.013	3	367	0.000	3	367	0.013
08:00 - 09:00	3	367	0.026	3	367	0.002	3	367	0.028
09:00 - 10:00	3	367	0.005	3	367	0.001	3	367	0.006
10:00 - 11:00	3	367	0.005	3	367	0.003	3	367	0.008
11:00 - 12:00	3	367	0.003	3	367	0.001	3	367	0.004
12:00 - 13:00	3	367	0.010	3	367	0.007	3	367	0.017
13:00 - 14:00	3	367	0.010	3	367	0.012	3	367	0.022
14:00 - 15:00	3	367	0.004	3	367	0.007	3	367	0.011
15:00 - 16:00	3	367	0.001	3	367	0.006	3	367	0.007
16:00 - 17:00	3	367	0.010	3	367	0.023	3	367	0.033
17:00 - 18:00	3	367	0.007	3	367	0.024	3	367	0.031
18:00 - 19:00	3	367	0.002	3	367	0.005	3	367	0.007
19:00 - 20:00	1	380	0.000	1	380	0.005	1	380	0.005
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.096			0.096			0.192

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.



TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.002	3	367	0.000	3	367	0.002
08:00 - 09:00	3	367	0.009	3	367	0.000	3	367	0.009
09:00 - 10:00	3	367	0.000	3	367	0.000	3	367	0.000
10:00 - 11:00	3	367	0.003	3	367	0.001	3	367	0.004
11:00 - 12:00	3	367	0.004	3	367	0.000	3	367	0.004
12:00 - 13:00	3	367	0.002	3	367	0.003	3	367	0.005
13:00 - 14:00	3	367	0.002	3	367	0.003	3	367	0.005
14:00 - 15:00	3	367	0.001	3	367	0.004	3	367	0.005
15:00 - 16:00	3	367	0.000	3	367	0.001	3	367	0.001
16:00 - 17:00	3	367	0.000	3	367	0.004	3	367	0.004
17:00 - 18:00	3	367	0.003	3	367	0.007	3	367	0.010
18:00 - 19:00	3	367	0.000	3	367	0.000	3	367	0.000
19:00 - 20:00	1	380	0.000	1	380	0.000	1	380	0.000
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.026			0.023			0.049

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL COACH PASSENGERS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.000	3	367	0.000	3	367	0.000
08:00 - 09:00	3	367	0.000	3	367	0.000	3	367	0.000
09:00 - 10:00	3	367	0.000	3	367	0.000	3	367	0.000
10:00 - 11:00	3	367	0.000	3	367	0.000	3	367	0.000
11:00 - 12:00	3	367	0.000	3	367	0.000	3	367	0.000
12:00 - 13:00	3	367	0.013	3	367	0.014	3	367	0.027
13:00 - 14:00	3	367	0.000	3	367	0.000	3	367	0.000
14:00 - 15:00	3	367	0.005	3	367	0.009	3	367	0.014
15:00 - 16:00	3	367	0.004	3	367	0.005	3	367	0.009
16:00 - 17:00	3	367	0.000	3	367	0.000	3	367	0.000
17:00 - 18:00	3	367	0.010	3	367	0.005	3	367	0.015
18:00 - 19:00	3	367	0.000	3	367	0.000	3	367	0.000
19:00 - 20:00	1	380	0.000	1	380	0.000	1	380	0.000
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.033			0.065

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.015	3	367	0.000	3	367	0.015
08:00 - 09:00	3	367	0.035	3	367	0.002	3	367	0.037
09:00 - 10:00	3	367	0.005	3	367	0.001	3	367	0.006
10:00 - 11:00	3	367	0.008	3	367	0.004	3	367	0.012
11:00 - 12:00	3	367	0.006	3	367	0.001	3	367	0.007
12:00 - 13:00	3	367	0.025	3	367	0.024	3	367	0.049
13:00 - 14:00	3	367	0.012	3	367	0.015	3	367	0.027
14:00 - 15:00	3	367	0.009	3	367	0.020	3	367	0.029
15:00 - 16:00	3	367	0.005	3	367	0.012	3	367	0.017
16:00 - 17:00	3	367	0.010	3	367	0.026	3	367	0.036
17:00 - 18:00	3	367	0.020	3	367	0.035	3	367	0.055
18:00 - 19:00	3	367	0.002	3	367	0.005	3	367	0.007
19:00 - 20:00	1	380	0.000	1	380	0.005	1	380	0.005
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.152			0.150			0.302

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WYG Executive Park, Avalon Way Leicester

Licence No: 705102

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.45

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.145	3	367	0.043	3	367	0.188
08:00 - 09:00	3	367	0.238	3	367	0.049	3	367	0.287
09:00 - 10:00	3	367	0.108	3	367	0.054	3	367	0.162
10:00 - 11:00	3	367	0.079	3	367	0.071	3	367	0.150
11:00 - 12:00	3	367	0.090	3	367	0.088	3	367	0.178
12:00 - 13:00	3	367	0.123	3	367	0.160	3	367	0.283
13:00 - 14:00	3	367	0.134	3	367	0.113	3	367	0.247
14:00 - 15:00	3	367	0.083	3	367	0.090	3	367	0.173
15:00 - 16:00	3	367	0.071	3	367	0.098	3	367	0.169
16:00 - 17:00	3	367	0.083	3	367	0.144	3	367	0.227
17:00 - 18:00	3	367	0.100	3	367	0.263	3	367	0.363
18:00 - 19:00	3	367	0.080	3	367	0.123	3	367	0.203
19:00 - 20:00	1	380	0.032	1	380	0.158	1	380	0.190
20:00 - 21:00	1	380	0.011	1	380	0.026	1	380	0.037
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			1.377			1.480			2.857

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WYG Executive Park, Avalon Way Leicester

Licence No: 705102

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL CARS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.076	3	367	0.013	3	367	0.089
08:00 - 09:00	3	367	0.128	3	367	0.015	3	367	0.143
09:00 - 10:00	3	367	0.041	3	367	0.012	3	367	0.053
10:00 - 11:00	3	367	0.016	3	367	0.013	3	367	0.029
11:00 - 12:00	3	367	0.025	3	367	0.032	3	367	0.057
12:00 - 13:00	3	367	0.027	3	367	0.055	3	367	0.082
13:00 - 14:00	3	367	0.057	3	367	0.041	3	367	0.098
14:00 - 15:00	3	367	0.027	3	367	0.031	3	367	0.058
15:00 - 16:00	3	367	0.015	3	367	0.026	3	367	0.041
16:00 - 17:00	3	367	0.026	3	367	0.055	3	367	0.081
17:00 - 18:00	3	367	0.037	3	367	0.144	3	367	0.181
18:00 - 19:00	3	367	0.041	3	367	0.072	3	367	0.113
19:00 - 20:00	1	380	0.011	1	380	0.097	1	380	0.108
20:00 - 21:00	1	380	0.000	1	380	0.013	1	380	0.013
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.527			0.619			1.146

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WYG Executive Park, Avalon Way Leicester

Licence No: 705102

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL LGVS

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.007	3	367	0.005	3	367	0.012
08:00 - 09:00	3	367	0.015	3	367	0.008	3	367	0.023
09:00 - 10:00	3	367	0.021	3	367	0.015	3	367	0.036
10:00 - 11:00	3	367	0.023	3	367	0.021	3	367	0.044
11:00 - 12:00	3	367	0.025	3	367	0.026	3	367	0.051
12:00 - 13:00	3	367	0.025	3	367	0.022	3	367	0.047
13:00 - 14:00	3	367	0.013	3	367	0.014	3	367	0.027
14:00 - 15:00	3	367	0.008	3	367	0.015	3	367	0.023
15:00 - 16:00	3	367	0.021	3	367	0.020	3	367	0.041
16:00 - 17:00	3	367	0.012	3	367	0.014	3	367	0.026
17:00 - 18:00	3	367	0.011	3	367	0.013	3	367	0.024
18:00 - 19:00	3	367	0.012	3	367	0.015	3	367	0.027
19:00 - 20:00	1	380	0.003	1	380	0.008	1	380	0.011
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.196			0.196			0.392

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.



TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL MOTOR CYCLES

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.001	3	367	0.000	3	367	0.001
08:00 - 09:00	3	367	0.001	3	367	0.000	3	367	0.001
09:00 - 10:00	3	367	0.000	3	367	0.000	3	367	0.000
10:00 - 11:00	3	367	0.000	3	367	0.000	3	367	0.000
11:00 - 12:00	3	367	0.001	3	367	0.001	3	367	0.002
12:00 - 13:00	3	367	0.002	3	367	0.000	3	367	0.002
13:00 - 14:00	3	367	0.002	3	367	0.001	3	367	0.003
14:00 - 15:00	3	367	0.000	3	367	0.001	3	367	0.001
15:00 - 16:00	3	367	0.004	3	367	0.003	3	367	0.007
16:00 - 17:00	3	367	0.004	3	367	0.002	3	367	0.006
17:00 - 18:00	3	367	0.001	3	367	0.004	3	367	0.005
18:00 - 19:00	3	367	0.001	3	367	0.001	3	367	0.002
19:00 - 20:00	1	380	0.000	1	380	0.000	1	380	0.000
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.017			0.013			0.030

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL Underground Passengers

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.000	3	367	0.000	3	367	0.000
08:00 - 09:00	3	367	0.002	3	367	0.000	3	367	0.002
09:00 - 10:00	3	367	0.000	3	367	0.000	3	367	0.000
10:00 - 11:00	3	367	0.000	3	367	0.000	3	367	0.000
11:00 - 12:00	3	367	0.000	3	367	0.000	3	367	0.000
12:00 - 13:00	3	367	0.000	3	367	0.000	3	367	0.000
13:00 - 14:00	3	367	0.000	3	367	0.000	3	367	0.000
14:00 - 15:00	3	367	0.000	3	367	0.000	3	367	0.000
15:00 - 16:00	3	367	0.000	3	367	0.000	3	367	0.000
16:00 - 17:00	3	367	0.000	3	367	0.000	3	367	0.000
17:00 - 18:00	3	367	0.000	3	367	0.000	3	367	0.000
18:00 - 19:00	3	367	0.000	3	367	0.000	3	367	0.000
19:00 - 20:00	1	380	0.000	1	380	0.000	1	380	0.000
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.000			0.002

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WYG Executive Park, Avalon Way Leicester

Licence No: 705102

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL Overground Passengers

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.000	3	367	0.000	3	367	0.000
08:00 - 09:00	3	367	0.000	3	367	0.000	3	367	0.000
09:00 - 10:00	3	367	0.000	3	367	0.000	3	367	0.000
10:00 - 11:00	3	367	0.000	3	367	0.000	3	367	0.000
11:00 - 12:00	3	367	0.000	3	367	0.000	3	367	0.000
12:00 - 13:00	3	367	0.001	3	367	0.000	3	367	0.001
13:00 - 14:00	3	367	0.000	3	367	0.000	3	367	0.000
14:00 - 15:00	3	367	0.000	3	367	0.000	3	367	0.000
15:00 - 16:00	3	367	0.000	3	367	0.001	3	367	0.001
16:00 - 17:00	3	367	0.000	3	367	0.000	3	367	0.000
17:00 - 18:00	3	367	0.000	3	367	0.000	3	367	0.000
18:00 - 19:00	3	367	0.000	3	367	0.000	3	367	0.000
19:00 - 20:00	1	380	0.000	1	380	0.000	1	380	0.000
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.001			0.002

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL National Rail Passengers

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.002	3	367	0.000	3	367	0.002
08:00 - 09:00	3	367	0.007	3	367	0.000	3	367	0.007
09:00 - 10:00	3	367	0.000	3	367	0.000	3	367	0.000
10:00 - 11:00	3	367	0.003	3	367	0.001	3	367	0.004
11:00 - 12:00	3	367	0.004	3	367	0.000	3	367	0.004
12:00 - 13:00	3	367	0.001	3	367	0.003	3	367	0.004
13:00 - 14:00	3	367	0.002	3	367	0.003	3	367	0.005
14:00 - 15:00	3	367	0.001	3	367	0.004	3	367	0.005
15:00 - 16:00	3	367	0.000	3	367	0.000	3	367	0.000
16:00 - 17:00	3	367	0.000	3	367	0.004	3	367	0.004
17:00 - 18:00	3	367	0.003	3	367	0.007	3	367	0.010
18:00 - 19:00	3	367	0.000	3	367	0.000	3	367	0.000
19:00 - 20:00	1	380	0.000	1	380	0.000	1	380	0.000
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.023			0.022			0.045

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL Bus Passengers

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.013	3	367	0.000	3	367	0.013
08:00 - 09:00	3	367	0.026	3	367	0.002	3	367	0.028
09:00 - 10:00	3	367	0.005	3	367	0.001	3	367	0.006
10:00 - 11:00	3	367	0.005	3	367	0.003	3	367	0.008
11:00 - 12:00	3	367	0.003	3	367	0.001	3	367	0.004
12:00 - 13:00	3	367	0.010	3	367	0.007	3	367	0.017
13:00 - 14:00	3	367	0.010	3	367	0.012	3	367	0.022
14:00 - 15:00	3	367	0.004	3	367	0.007	3	367	0.011
15:00 - 16:00	3	367	0.001	3	367	0.006	3	367	0.007
16:00 - 17:00	3	367	0.010	3	367	0.023	3	367	0.033
17:00 - 18:00	3	367	0.007	3	367	0.024	3	367	0.031
18:00 - 19:00	3	367	0.002	3	367	0.005	3	367	0.007
19:00 - 20:00	1	380	0.000	1	380	0.005	1	380	0.005
20:00 - 21:00	1	380	0.000	1	380	0.000	1	380	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.096			0.096			0.192

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL Servicing Vehicles

Calculation factor: 1 EMPLOY

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate	No. Days	Ave. EMPLOY	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	367	0.024	3	367	0.025	3	367	0.049
08:00 - 09:00	3	367	0.025	3	367	0.023	3	367	0.048
09:00 - 10:00	3	367	0.039	3	367	0.033	3	367	0.072
10:00 - 11:00	3	367	0.035	3	367	0.040	3	367	0.075
11:00 - 12:00	3	367	0.043	3	367	0.039	3	367	0.082
12:00 - 13:00	3	367	0.042	3	367	0.042	3	367	0.084
13:00 - 14:00	3	367	0.034	3	367	0.034	3	367	0.068
14:00 - 15:00	3	367	0.026	3	367	0.027	3	367	0.053
15:00 - 16:00	3	367	0.035	3	367	0.034	3	367	0.069
16:00 - 17:00	3	367	0.026	3	367	0.025	3	367	0.051
17:00 - 18:00	3	367	0.023	3	367	0.026	3	367	0.049
18:00 - 19:00	3	367	0.021	3	367	0.022	3	367	0.043
19:00 - 20:00	1	380	0.013	1	380	0.026	1	380	0.039
20:00 - 21:00	1	380	0.011	1	380	0.003	1	380	0.014
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.397			0.399			0.796

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.



## APPENDIX G – TRIP DISTRIBUTION FLOW DIAGRAMS

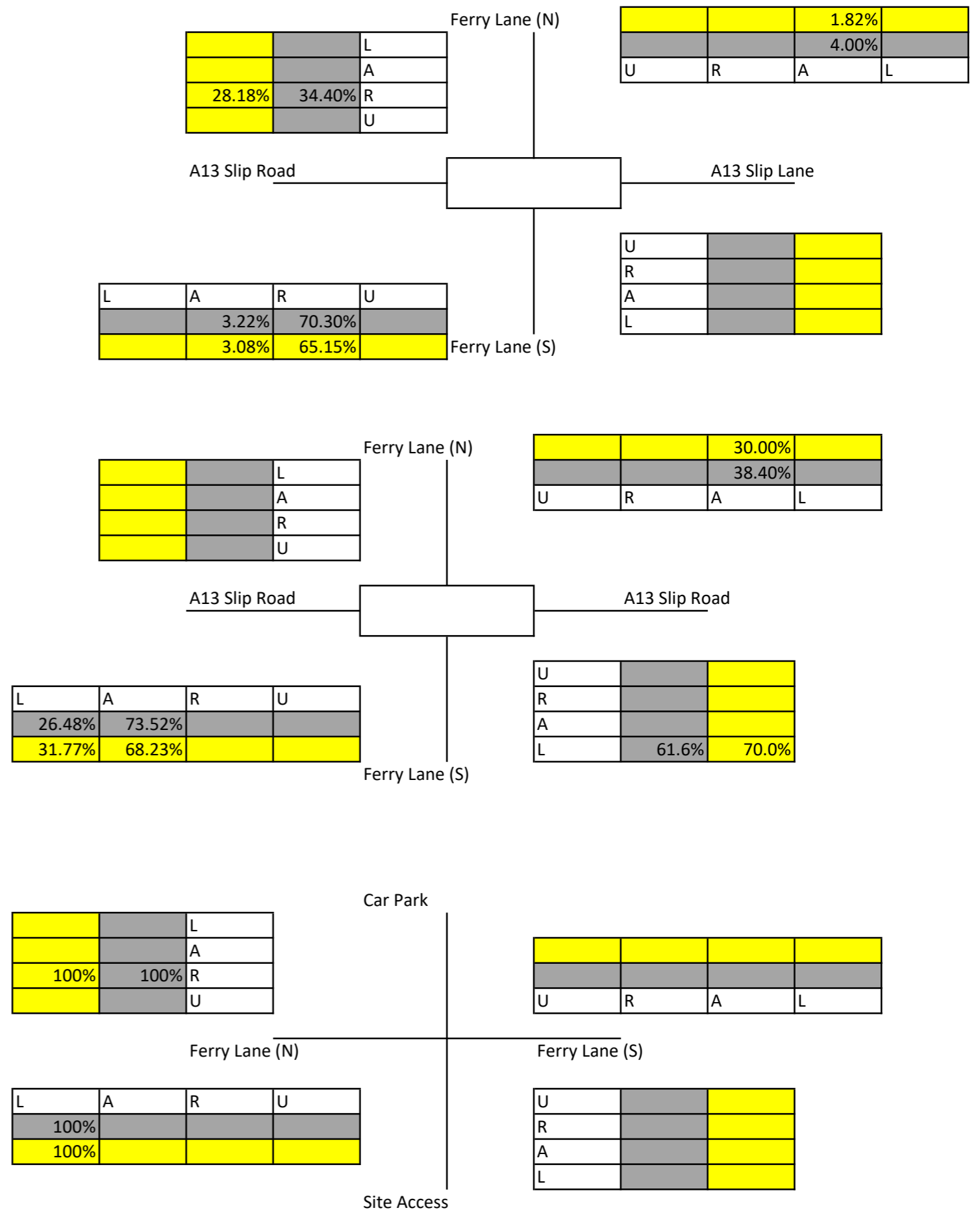
---




**Project:** Frog Island  
**Spreadsheet:** Site Trip Distr  
**Date:** 09.04.2024

**Notes:**

Key:  
 AM Distr   
 PM Distr 





**TETRA TECH**

**Project:** Frog Island  
**Spreadsheet:** AM Trip Distribution  
**Date:** 09.04.2024

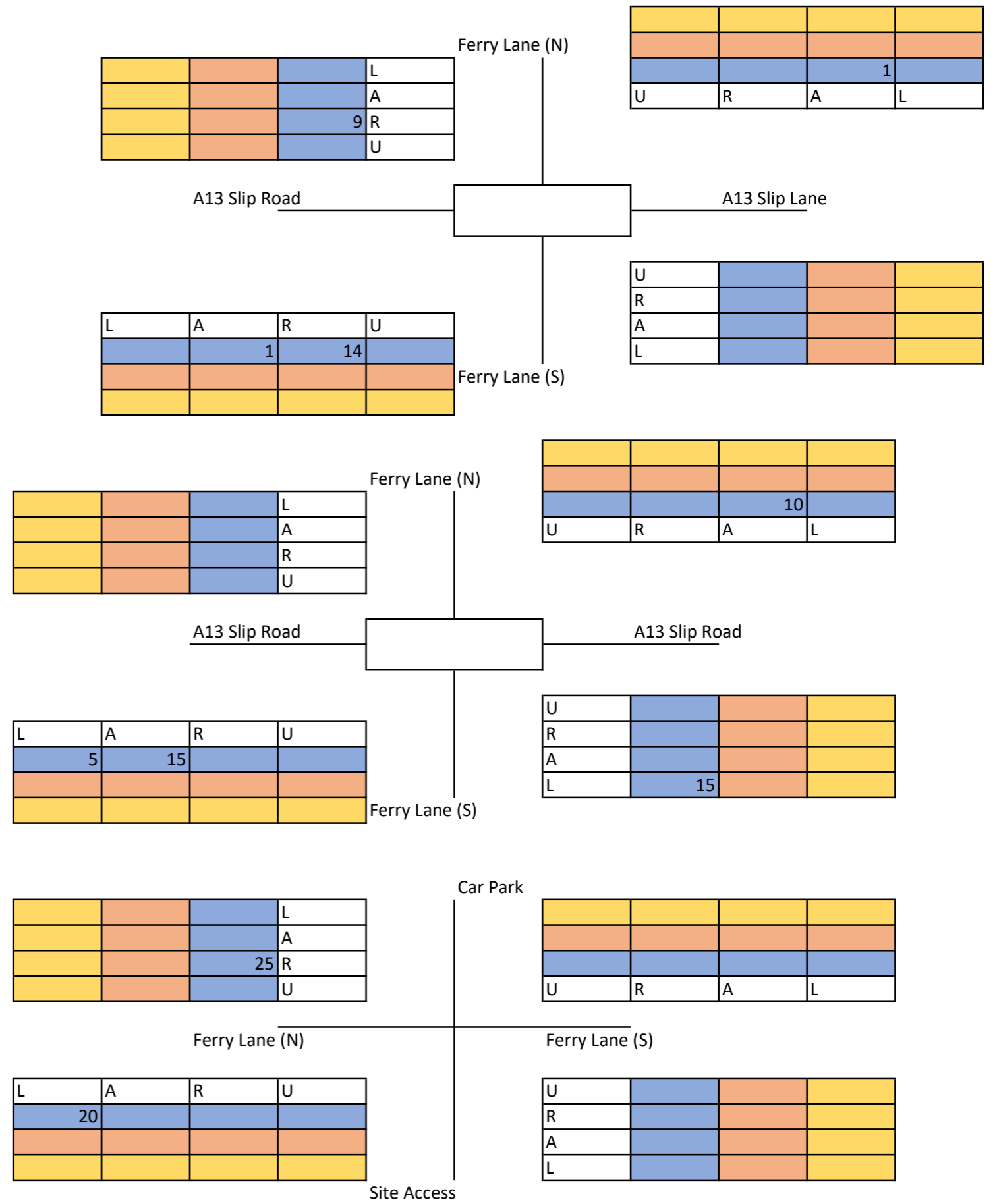
**Note:**

**Key:**

Vehicle (No.)	Blue
Vehicle (PCU)	Yellow
HGV (%)	Orange

Number of Trips (vehicles)

	total	in	out
AM Peak	45	25	20
PM Peak	59	33	26
Daily	383	183	200





**Tt TETRA TECH**


**Project:** Frog Island  
**Spreadsheet:** PM Trip Distribution  
**Date:** 09.04.2024

**Note:**

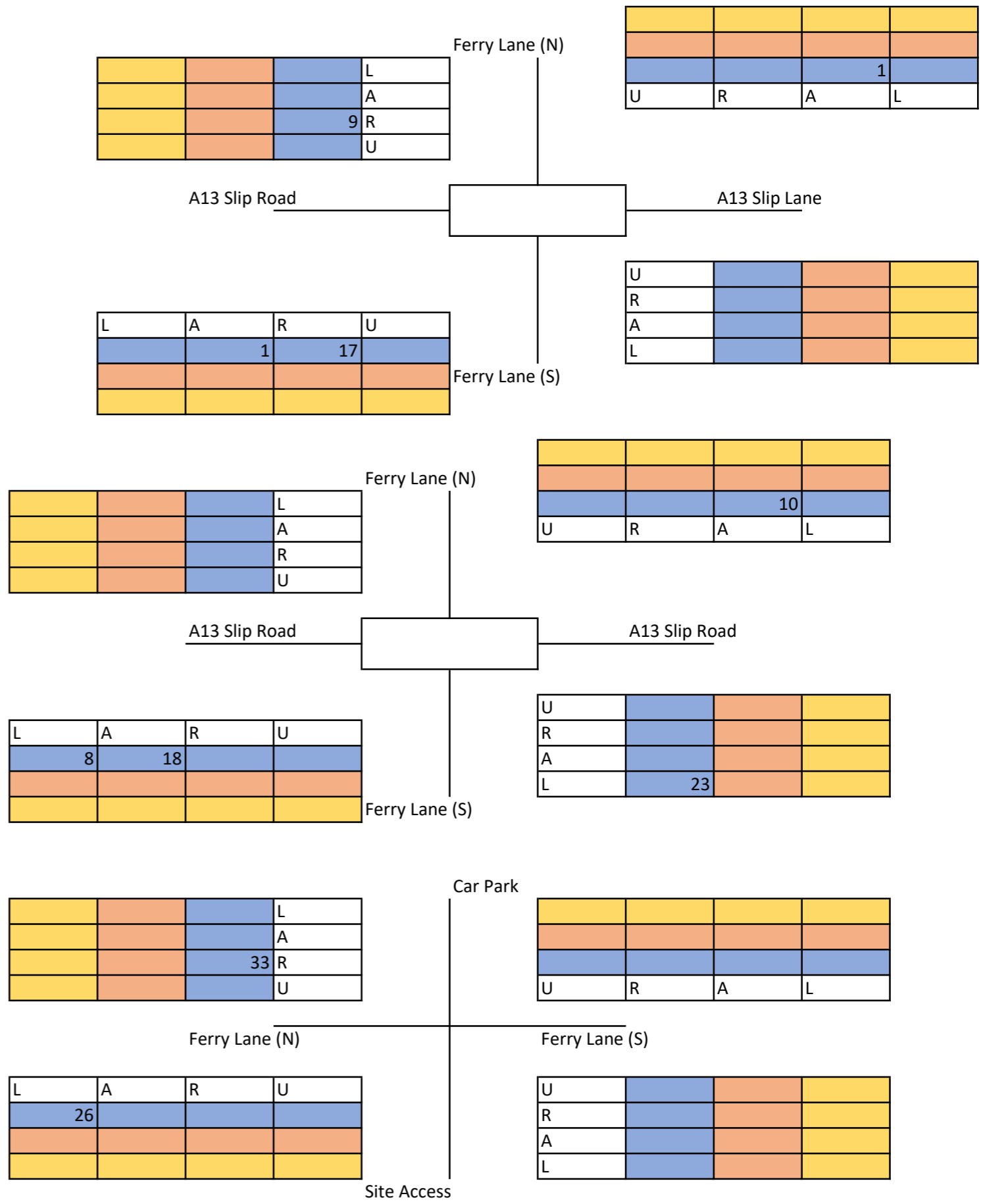
**Key:**

Vehicle (No.) 

Vehicle (PCU) 

HGV (%) 

	Number of Trips (vehicles)			
	total	in	out	
AM Peak	45	25	20	
PM Peak	59	33	26	
Daily	383	183	200	





Junctions 10
PICADY 10 - Priority Intersection Module
Version: 10.1.1.1905 © Copyright TRL Software Limited, 2023
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

**Filename:** Ferry Lane\_GRS Site Access\_Staggered.j10  
**Path:** T:\Projects\784-B065006\_Frog\_Island\60 Project Output\Transport\3. Calculations\Modelling  
**Report generation date:** 09/04/2024 13:35:07

- »2024 Base Year, AM
- »2024 Base Year, PM
- »2029 Future Year, AM
- »2029 Future Year, PM

**Summary of junction performance**

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
<b>2024 Base Year</b>						
Stream B-ACD	0.0	0.00	0.00	0.0	0.00	0.00
Stream AB-CD	0.1	8.28	0.06	0.0	8.61	0.03
Stream D-ABC	0.0	11.81	0.04	0.1	6.83	0.07
Stream CD-AB	0.0	12.22	0.00	0.0	0.00	0.00
<b>2029 Future Year</b>						
Stream B-ACD	0.0	0.00	0.00	0.0	0.00	0.00
Stream AB-CD	0.1	8.22	0.07	0.0	8.62	0.03
Stream D-ABC	0.0	11.83	0.04	0.1	6.86	0.07
Stream CD-AB	0.0	12.22	0.00	0.0	0.00	0.00

*Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

**File summary**

**File Description**

<b>Title</b>	
<b>Location</b>	
<b>Site number</b>	
<b>Date</b>	02/04/2024
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	
<b>Jobnumber</b>	
<b>Enumerator</b>	TTVISSAC.CRANSTON
<b>Description</b>	

### Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

### Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

### Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2024 Base Year	AM	ONE HOUR	07:15	08:45	15	✓		
D2	2024 Base Year	PM	ONE HOUR	16:00	17:30	15	✓		
D5	2029 Future Year	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1 * G1
D6	2029 Future Year	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2 * G2

### Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1			1.0373
G2			1.0380

*Growth factors are only active if a Demand Set references them in a Relationship.*

### Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000



# 2024 Base Year, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		1.34	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.34	A

## Arms

### Arms

Arm	Name	Description	Arm type
A	Ferry Lane (north)		Major
B	Car Park Access		Minor
C	Ferry Lane (south)		Major
D	GRS Site Access		Minor

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Ferry Lane (north)	8.32			198.2	✓	0.00
C - Ferry Lane (south)	8.32			180.7	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Car Park Access	One lane	4.00	35	50
D - GRS Site Access	One lane	4.48	198	27

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
AB-D	689	-	-	-	-	-	0.240	0.240	0.240	-	-
B-A	565	0.093	0.234	0.234	-	-	0.147	0.334	-	0.147	0.334
B-CD	721	0.099	0.251	0.251	-	-	-	-	-	-	-
CD-B	679	0.236	0.236	0.236	-	-	-	-	-	-	-
D-AB	736	-	-	-	-	-	0.256	0.256	0.101	-	-
D-C	637	-	0.166	0.377	0.166	0.377	0.264	0.264	0.104	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Base Year	AM	ONE HOUR	07:15	08:45	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ferry Lane (north)		ONE HOUR	✓	186	100.000
B - Car Park Access		ONE HOUR	✓	1	100.000
C - Ferry Lane (south)		ONE HOUR	✓	20	100.000
D - GRS Site Access		ONE HOUR	✓	11	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A - Ferry Lane (north)	B - Car Park Access	C - Ferry Lane (south)	D - GRS Site Access
From	A - Ferry Lane (north)	0	1	167	18
	B - Car Park Access	1	0	0	0
	C - Ferry Lane (south)	19	1	0	0
	D - GRS Site Access	11	0	0	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.30

### Heavy Vehicle %

		To			
		A - Ferry Lane (north)	B - Car Park Access	C - Ferry Lane (south)	D - GRS Site Access
From	A - Ferry Lane (north)	0	0	3	72
	B - Car Park Access	100	0	0	0
	C - Ferry Lane (south)	11	100	0	0
	D - GRS Site Access	100	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.00	0.00	0.0	A	0	0
A-B					0.92	1
A-C					153	230
A-D					17	25
AB-CD	0.06	8.28	0.1	A	25	37
AB-C					145	218
D-ABC	0.04	11.81	0.0	B	10	15
C-D					0	0
C-A					17	26
C-B					1	1
CD-AB	0.00	12.22	0.0	B	1	2
CD-A					27	41

### Main Results for each time segment

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-B	0.75	0.19			0.75				
A-C	126	31			126				
A-D	14	3			14				
AB-CD	19	5	454	0.041	19	0.0	0.1	8.276	A
AB-C	121	30			121				
D-ABC	8	2	318	0.026	8	0.0	0.0	11.618	B
C-D	0	0			0				
C-A	14	4			14				
C-B	1	0.19			1				
CD-AB	1	0.20	296	0.003	1	0.0	0.0	12.200	B
CD-A	22	6			22				

#### 07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	440	0.000	0	0.0	0.0	0.000	A
A-B	0.90	0.22			0.90				
A-C	150	38			150				
A-D	16	4			16				
AB-CD	24	6	473	0.050	24	0.1	0.1	8.096	A
AB-C	143	36			143				
D-ABC	10	2	318	0.031	10	0.0	0.0	11.700	B
C-D	0	0			0				
C-A	17	4			17				
C-B	1	0.22			1				
CD-AB	1	0.25	296	0.003	1	0.0	0.0	12.219	B
CD-A	27	7			27				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	432	0.000	0	0.0	0.0	0.000	A
A-B	1	0.28			1				
A-C	184	46			184				
A-D	20	5			20				
AB-CD	31	8	499	0.063	31	0.1	0.1	7.791	A
AB-C	172	43			172				
D-ABC	12	3	317	0.038	12	0.0	0.0	11.804	B
C-D	0	0			0				
C-A	21	5			21				
C-B	1	0.28			1				
CD-AB	1	0.31	297	0.004	1	0.0	0.0	12.221	B
CD-A	33	8			33				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	432	0.000	0	0.0	0.0	0.000	A
A-B	1	0.28			1				
A-C	184	46			184				
A-D	20	5			20				
AB-CD	32	8	500	0.063	32	0.1	0.1	7.694	A
AB-C	172	43			172				
D-ABC	12	3	317	0.038	12	0.0	0.0	11.806	B
C-D	0	0			0				
C-A	21	5			21				
C-B	1	0.28			1				
CD-AB	1	0.31	297	0.004	1	0.0	0.0	12.186	B
CD-A	33	8			33				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	440	0.000	0	0.0	0.0	0.000	A
A-B	0.90	0.22			0.90				
A-C	150	38			150				
A-D	16	4			16				
AB-CD	24	6	474	0.050	24	0.1	0.1	7.881	A
AB-C	142	36			142				
D-ABC	10	2	318	0.031	10	0.0	0.0	11.704	B
C-D	0	0			0				
C-A	17	4			17				
C-B	1	0.22			1				
CD-AB	1	0.25	296	0.003	1	0.0	0.0	12.142	B
CD-A	27	7			27				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-B	0.75	0.19			0.75				
A-C	126	31			126				
A-D	14	3			14				
AB-CD	19	5	454	0.041	19	0.1	0.1	8.167	A
AB-C	120	30			120				
D-ABC	8	2	318	0.026	8	0.0	0.0	11.626	B
C-D	0	0			0				
C-A	14	4			14				
C-B	1	0.19			1				
CD-AB	1	0.20	296	0.003	1	0.0	0.0	12.159	B
CD-A	23	6			23				

# 2024 Base Year, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		0.98	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.98	A

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 Base Year	PM	ONE HOUR	16:00	17:30	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ferry Lane (north)		ONE HOUR	✓	36	100.000
B - Car Park Access		ONE HOUR	✓	0	100.000
C - Ferry Lane (south)		ONE HOUR	✓	138	100.000
D - GRS Site Access		ONE HOUR	✓	34	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A - Ferry Lane (north)	B - Car Park Access	C - Ferry Lane (south)	D - GRS Site Access
From	A - Ferry Lane (north)	0	0	25	11
	B - Car Park Access	0	0	0	0
	C - Ferry Lane (south)	138	0	0	0
	D - GRS Site Access	34	0	0	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.30

**Heavy Vehicle %**

		To			
		A - Ferry Lane (north)	B - Car Park Access	C - Ferry Lane (south)	D - GRS Site Access
From	A - Ferry Lane (north)	0	0	8	45
	B - Car Park Access	0	0	0	0
	C - Ferry Lane (south)	1	0	0	0
	D - GRS Site Access	18	0	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					23	34
A-D					10	15
AB-CD	0.03	8.61	0.0	A	11	16
AB-C					22	34
D-ABC	0.07	6.83	0.1	A	31	47
C-D					0	0
C-A					127	190
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					158	237

**Main Results for each time segment**

**16:00 - 16:15**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	612	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	19	5			19				
A-D	8	2			8				
AB-CD	9	2	433	0.020	9	0.0	0.0	8.490	A
AB-C	18	5			18				
D-ABC	26	6	574	0.045	25	0.0	0.0	6.555	A
C-D	0	0			0				
C-A	104	26			104				
C-B	0	0			0				
CD-AB	0	0	599	0.000	0	0.0	0.0	0.000	A
CD-A	129	32			129				



16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	608	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	22	6			22				
A-D	10	2			10				
AB-CD	10	3	432	0.024	10	0.0	0.0	8.543	A
AB-C	22	5			22				
D-ABC	31	8	570	0.054	31	0.0	0.1	6.669	A
C-D	0	0			0				
C-A	124	31			124				
C-B	0	0			0				
CD-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
CD-A	155	39			155				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	602	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	28	7			28				
A-D	12	3			12				
AB-CD	13	3	432	0.030	13	0.0	0.0	8.607	A
AB-C	27	7			27				
D-ABC	37	9	564	0.066	37	0.1	0.1	6.831	A
C-D	0	0			0				
C-A	152	38			152				
C-B	0	0			0				
CD-AB	0	0	595	0.000	0	0.0	0.0	0.000	A
CD-A	189	47			189				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	602	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	28	7			28				
A-D	12	3			12				
AB-CD	13	3	432	0.030	13	0.0	0.0	8.592	A
AB-C	27	7			27				
D-ABC	37	9	564	0.066	37	0.1	0.1	6.831	A
C-D	0	0			0				
C-A	152	38			152				
C-B	0	0			0				
CD-AB	0	0	595	0.000	0	0.0	0.0	0.000	A
CD-A	189	47			189				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	608	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	22	6			22				
A-D	10	2			10				
AB-CD	10	3	432	0.024	10	0.0	0.0	8.516	A
AB-C	22	5			22				
D-ABC	31	8	570	0.054	31	0.1	0.1	6.673	A
C-D	0	0			0				
C-A	124	31			124				
C-B	0	0			0				
CD-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
CD-A	155	39			155				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	612	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	19	5			19				
A-D	8	2			8				
AB-CD	9	2	433	0.020	9	0.0	0.0	8.480	A
AB-C	18	5			18				
D-ABC	26	6	574	0.045	26	0.1	0.0	6.558	A
C-D	0	0			0				
C-A	104	26			104				
C-B	0	0			0				
CD-AB	0	0	599	0.000	0	0.0	0.0	0.000	A
CD-A	130	32			130				

# 2029 Future Year, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		1.35	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.35	A

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D5	2029 Future Year	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D1 * G1

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ferry Lane (north)		ONE HOUR	✓	193	100.000
B - Car Park Access		ONE HOUR	✓	1	100.000
C - Ferry Lane (south)		ONE HOUR	✓	21	100.000
D - GRS Site Access		ONE HOUR	✓	11	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A - Ferry Lane (north)	B - Car Park Access	C - Ferry Lane (south)	D - GRS Site Access
From	A - Ferry Lane (north)	0	1	173	19
	B - Car Park Access	1	0	0	0
	C - Ferry Lane (south)	20	1	0	0
	D - GRS Site Access	11	0	0	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.30

### Heavy Vehicle %

		To			
		A - Ferry Lane (north)	B - Car Park Access	C - Ferry Lane (south)	D - GRS Site Access
From	A - Ferry Lane (north)	0	0	3	72
	B - Car Park Access	100	0	0	0
	C - Ferry Lane (south)	11	100	0	0
	D - GRS Site Access	100	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.00	0.00	0.0	A	0	0
A-B					0.95	1
A-C					159	238
A-D					17	26
AB-CD	0.07	8.22	0.1	A	26	39
AB-C					150	225
D-ABC	0.04	11.83	0.0	B	10	16
C-D					0	0
C-A					18	27
C-B					1	1
CD-AB	0.00	12.22	0.0	B	1	2
CD-A					28	43

### Main Results for each time segment

#### 07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	445	0.000	0	0.0	0.0	0.000	A
A-B	0.78	0.20			0.78				
A-C	130	33			130				
A-D	14	4			14				
AB-CD	20	5	457	0.043	19	0.0	0.1	8.220	A
AB-C	125	31			125				
D-ABC	9	2	318	0.027	8	0.0	0.0	11.632	B
C-D	0	0			0				
C-A	15	4			15				
C-B	1	0.20			1				
CD-AB	1	0.21	296	0.003	1	0.0	0.0	12.199	B
CD-A	23	6			23				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	439	0.000	0	0.0	0.0	0.000	A
A-B	0.93	0.23			0.93				
A-C	156	39			156				
A-D	17	4			17				
AB-CD	25	6	477	0.052	25	0.1	0.1	8.044	A
AB-C	148	37			148				
D-ABC	10	3	317	0.032	10	0.0	0.0	11.717	B
C-D	0	0			0				
C-A	18	4			18				
C-B	1	0.23			1				
CD-AB	1	0.26	296	0.003	1	0.0	0.0	12.219	B
CD-A	28	7			28				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	430	0.000	0	0.0	0.0	0.000	A
A-B	1	0.29			1				
A-C	191	48			191				
A-D	21	5			21				
AB-CD	33	8	505	0.066	33	0.1	0.1	7.734	A
AB-C	178	45			178				
D-ABC	13	3	317	0.040	13	0.0	0.0	11.825	B
C-D	0	0			0				
C-A	22	5			22				
C-B	1	0.29			1				
CD-AB	1	0.32	297	0.004	1	0.0	0.0	12.221	B
CD-A	34	9			34				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	430	0.000	0	0.0	0.0	0.000	A
A-B	1	0.29			1				
A-C	191	48			191				
A-D	21	5			21				
AB-CD	33	8	505	0.066	33	0.1	0.1	7.634	A
AB-C	178	45			178				
D-ABC	13	3	317	0.040	13	0.0	0.0	11.828	B
C-D	0	0			0				
C-A	22	5			22				
C-B	1	0.29			1				
CD-AB	1	0.32	297	0.004	1	0.0	0.0	12.184	B
CD-A	34	9			34				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	439	0.000	0	0.0	0.0	0.000	A
A-B	0.93	0.23			0.93				
A-C	156	39			156				
A-D	17	4			17				
AB-CD	25	6	478	0.052	25	0.1	0.1	7.823	A
AB-C	147	37			147				
D-ABC	10	3	317	0.032	10	0.0	0.0	11.722	B
C-D	0	0			0				
C-A	18	4			18				
C-B	1	0.23			1				
CD-AB	1	0.26	296	0.003	1	0.0	0.0	12.142	B
CD-A	28	7			28				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	445	0.000	0	0.0	0.0	0.000	A
A-B	0.78	0.20			0.78				
A-C	130	33			130				
A-D	14	4			14				
AB-CD	20	5	458	0.043	20	0.1	0.1	8.112	A
AB-C	125	31			125				
D-ABC	9	2	318	0.027	9	0.0	0.0	11.641	B
C-D	0	0			0				
C-A	15	4			15				
C-B	1	0.20			1				
CD-AB	1	0.21	296	0.003	1	0.0	0.0	12.157	B
CD-A	23	6			23				

# 2029 Future Year, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		0.98	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.98	A

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D6	2029 Future Year	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2 * G2

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ferry Lane (north)		ONE HOUR	✓	37	100.000
B - Car Park Access		ONE HOUR	✓	0	100.000
C - Ferry Lane (south)		ONE HOUR	✓	143	100.000
D - GRS Site Access		ONE HOUR	✓	35	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A - Ferry Lane (north)	B - Car Park Access	C - Ferry Lane (south)	D - GRS Site Access
From	A - Ferry Lane (north)	0	0	26	11
	B - Car Park Access	0	0	0	0
	C - Ferry Lane (south)	143	0	0	0
	D - GRS Site Access	35	0	0	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.30



**Heavy Vehicle %**

		To			
		A - Ferry Lane (north)	B - Car Park Access	C - Ferry Lane (south)	D - GRS Site Access
From	A - Ferry Lane (north)	0	0	8	45
	B - Car Park Access	0	0	0	0
	C - Ferry Lane (south)	1	0	0	0
	D - GRS Site Access	18	0	0	0

**Results**

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					24	36
A-D					10	16
AB-CD	0.03	8.62	0.0	A	11	17
AB-C					23	35
D-ABC	0.07	6.86	0.1	A	32	49
C-D					0	0
C-A					131	197
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					164	246

**Main Results for each time segment**

**16:00 - 16:15**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	612	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	20	5			20				
A-D	9	2			9				
AB-CD	9	2	433	0.021	9	0.0	0.0	8.495	A
AB-C	19	5			19				
D-ABC	27	7	574	0.046	26	0.0	0.0	6.576	A
C-D	0	0			0				
C-A	108	27			108				
C-B	0	0			0				
CD-AB	0	0	598	0.000	0	0.0	0.0	0.000	A
CD-A	134	34			134				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	607	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	23	6			23				
A-D	10	3			10				
AB-CD	11	3	432	0.025	11	0.0	0.0	8.554	A
AB-C	23	6			23				
D-ABC	32	8	569	0.056	32	0.0	0.1	6.696	A
C-D	0	0			0				
C-A	129	32			129				
C-B	0	0			0				
CD-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
CD-A	160	40			160				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	601	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
A-D	13	3			13				
AB-CD	13	3	432	0.031	13	0.0	0.0	8.620	A
AB-C	28	7			28				
D-ABC	39	10	563	0.069	39	0.1	0.1	6.865	A
C-D	0	0			0				
C-A	158	39			158				
C-B	0	0			0				
CD-AB	0	0	595	0.000	0	0.0	0.0	0.000	A
CD-A	197	49			197				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	601	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
A-D	13	3			13				
AB-CD	13	3	432	0.031	13	0.0	0.0	8.605	A
AB-C	28	7			28				
D-ABC	39	10	563	0.069	39	0.1	0.1	6.865	A
C-D	0	0			0				
C-A	158	39			158				
C-B	0	0			0				
CD-AB	0	0	595	0.000	0	0.0	0.0	0.000	A
CD-A	197	49			197				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	607	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	23	6			23				
A-D	10	3			10				
AB-CD	11	3	432	0.025	11	0.0	0.0	8.527	A
AB-C	23	6			23				
D-ABC	32	8	569	0.056	32	0.1	0.1	6.697	A
C-D	0	0			0				
C-A	129	32			129				
C-B	0	0			0				
CD-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
CD-A	161	40			161				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	0	612	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	20	5			20				
A-D	9	2			9				
AB-CD	9	2	433	0.021	9	0.0	0.0	8.488	A
AB-C	19	5			19				
D-ABC	27	7	574	0.046	27	0.1	0.0	6.580	A
C-D	0	0			0				
C-A	108	27			108				
C-B	0	0			0				
CD-AB	0	0	598	0.000	0	0.0	0.0	0.000	A
CD-A	134	34			134				

## APPENDIX I – FULL FLOW DIAGRAMS

---



**Project:** Frog Island  
**Spreadsheet:** 2024 Base AM Peak  
**Date:** 09.04.2024

**Note:**

Key:

Vehicle (No.)	
Vehicle (PCU)	
HGV (%)	

1.00	0%	1	L
170.10	3%	167	A
34.10	72%	18	R
-	0%	0	U

Car Park

-	1.50	-	-
0%	100%	0%	0%
0	1	0	0
U	R	A	L

Ferry Lane (N)

L	A	R	U
11	0	0	0
100%	0%	0%	0%
24.50	-	-	-

Ferry Lane (S)

U	0	0%	-
R	1	100%	1.50
A	19	11%	20.80
L	0	0%	-

Site Access



**Project:** Frog Island  
**Spreadsheet:** 2024 Base PM Peak  
**Date:** 09.04.2024

**Note:**

Key:

Vehicle (No.)	
Vehicle (PCU)	
HGV (%)	

-	0%	0	L
26.00	8%	25	A
17.50	45%	11	R
-	0%	0	U

Car Park

-	-	-	-
0%	0%	0%	0%
0	0	0	0
U	R	A	L

Ferry Lane (N)

L	A	R	U
34	0	0	0
18%	0%	0%	0%
41.80	-	-	-

Ferry Lane (S)

U	0	0%	-
R	0	0%	-
A	138	1%	138.60
L	0	0%	-

Site Access

**Tt TETRA TECH**

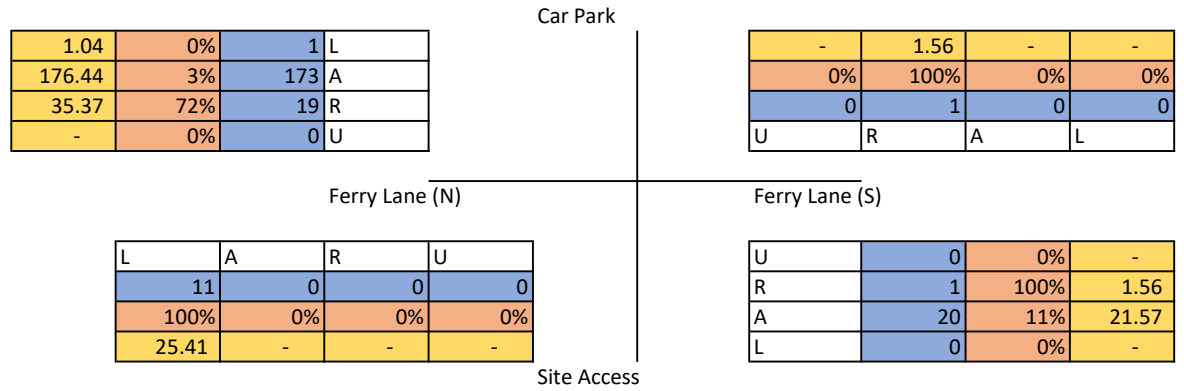
**Project:** Frog Island  
**Spreadsheet:** 2029 Future Year AM Peak  
**Date:** 09.04.2024

**Note:**

Key:

Vehicle (No.)	Blue
Vehicle (PCU)	Yellow
HGV (%)	Orange

AM Tempro Factor 1.037254  
 PM Tempro Factor 1.037954










# TETRA TECH

**Project:** Frog Island  
**Spreadsheet:** 2029 Future Year PM Peak  
**Date:** 09.04.2024

**Note:**

**Key:**  
 Vehicle (No.)   
 Vehicle (PCU)   
 HGV (%) 

AM Tempro Factor 1.037254  
 PM Tempro Factor 1.037954

-	0%	0	L
26.99	8%	26	A
18.16	45%	11	R
-	0%	0	U

Car Park

-	-	-	-
0%	0%	0%	0%
0	0	0	0
U	R	A	L

Ferry Lane (N)

L	A	R	U
35	0	0	0
18%	0%	0%	0%
43.39	-	-	-

Ferry Lane (S)

U	0	0%	-
R	0	0%	-
A	143	1%	143.86
L	0	0%	-

Site Access